

# VALVES

/ Product Catalog

2019  
v1.0





# / Contents

## → CONTROL VALVES

75 Series 4	
75 Series - 3"H - 6"R .....	6
75 Series - 6" - 8"R .....	8
80 Series 10	
80QR -	
Special Quick Relief.....	12
80W - Dual Outlet Valve.....	13
90 Series 14	
100 Series .....	16
Typical Applications.....	18
Pilots, Solenoids	
& Hydraulic Relays.....	20
29-50M Pilot .....	22
Description Guide .....	24
Standards Table.....	25
Catalog Numbers	
for Main Products.....	26

NEW  
NEW

## → SPARE PARTS

### 75 SERIES

1½" - 3"R / 40mm - 80mm.....	28
3" - 4"R / 80mm - 100mm.....	29
3H" - 6"R / 100mm - 150mm .....	30

### 80 SERIES

1½" - 2" / 40mm - 50mm.....	31
3" - 4"R / 80mm - 100mm.....	32

### 90 SERIES

3" - 6" / 80mm - 150mm .....	33
------------------------------	----

### 100 SERIES

1½"- 4" / 40mm - 100mm .....	34
6" - 10" / 150mm - 250mm.....	35

## → AQUANET™

AquaNet™	
AC/DC Electric Valve .....	36
AquaNet™ ¾" - 1" .....	37
AquaNet™ Plus 1½" - 2" Angle .....	38

## → PILOTS, RELAYS & FLOATS

Plastic Pilots .....	40
Metal Pilots .....	42
Relays & Floats .....	44

## → SOLENOIDS

Aquative Plus™ .....	46
Baccara™ Solenoids.....	48
DOROT™ Solenoids .....	50
ii.ri™ Bluetooth Solenoids.....	52

## → COMPLEMENTARY ACCESORIES

Fittings .....	54
Pressure Gauges .....	55
Additional Components .....	56

## → NETAFIM™ CONTROL VALVES APP..... 58

## → MANUAL VALVES

## → PLASTIC VALVES

True Union Ball Valves .....	60
Dual True Union Ball Valves .....	68
Angle Seat "Y" Valves .....	72
PVC Butterfly Valves .....	74
Throttle Valves .....	78
PVC Swing Wafer Check Valves ..	80
Ball Check Valves .....	82
Brass 3-Way Ball Valves .....	84

## → METAL VALVES

Wafer Connection	
Butterfly Metal Valves .....	86
Resilient Seat	
Metal Gate Valves .....	88
Metal Check Valves .....	90

Products appearing in this catalogue may be covered by one or more of the following US Patent Nos. 7644735, 7410108 and other U.S. patents pending or corresponding issued or pending foreign patents. All rights are reserved. You are specifically prohibited and not allowed to reproduce, copy, duplicate, manufacture, supply, sell, hire, distribute or adapt all or any part of this publication including any packaging. Netafim™, are trademarks of Netafim™ Ltd., registered in the U.S. and other countries. We endeavor to provide accurate, quality and detailed information. However we cannot accept liability for your reliance on the provided information and you are advised to independently seek professional advice from Netafim™ and/or its authorized representatives. There is no undertaking by us that the provided information or any part thereof is accurate, complete or up to date. Mention of third-party products is for informational purposes only and constitutes neither an endorsement nor a recommendation. Netafim™ assumes no responsibility with regard to the performance or use of these products. In no event shall Netafim™ be liable for any indirect, incidental, special or consequential damages.

# 75 SERIES CONTROL VALVES

The strong and versatile polypropylene valves of 75 series, exhibit exceptional hydraulic characteristics and provide optimal control of leaching systems.



Outstanding  
Performances



Ultimate  
Durability



Extremely  
Versatile

## Benefits & Features

### → Outstanding performance

High flow capacity and very low head losses achieved by a flexible diaphragm that provides a wide water passage throughout the valve's hydrodynamic body

### → Ultimated durability

Structure materials resistant to strong acids used in the leaching process

### → Extremely versatile

Gal plastic valves are available with full selection of control functions and various end connections

## Specifications & Recommendations

- Maximum pressure – 10 bar (145 psi), for 4" and up 12 bar (175 psi)
- Minimum recommended flow – 1 m<sup>3</sup>/h (5 gpm)
- Minimum operating pressure – 0.4 bar (6 psi)
- Maximum operating temperature – 60°C (140°F)

## → HYDRAULIC PERFORMANCE

DIAMETER	INCH	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	$3R^*$	3	$4R^*$	$3H^*$	4	$6R^*$	6	$8R^*$
	MM	20	25	40	50	65	80	80	100	80	100	150	150	200
FLOW RATE FACTOR**	KV	7.5	15	60	70	75	80	120	250	350		580		
	CV	9	17.5	70	80	90	92	140	290	410		690		

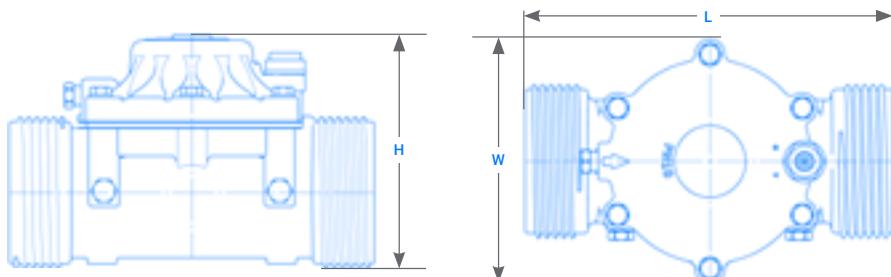
\* R – "Reduced" - 3R = 323", 4R = 434", 6R = 646" 8"R=868. H=High Flow, 3H=343"

\*\* In order to calculate the head loss at any desired flow rate, use the following equation: Head loss = (Flow rate/Flow rate factor)<sup>2</sup>

## → TECHNICAL DIMENSIONS

DIAMETER	INCH	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	$3R^*$	3*	$4R^*$	4*	$6R^*$	6*	$8R^*$		
	MM	20	25	40	50	65	80	80	100	100	150	150	200		
HEIGHT	H			60.5/2.42	122.6/4.90	117.6/4.70	118.7/4.75	124.9/5.00	174/6.90	227/9.10	229/9.00	284/11.18	142/5.6	173/6.8	
WIDTH	W	MM / INCH		89.5/3.58		130.8/5.23		170/6.80		236/9.29	285/11.22	285/11.22	347/13.7		
LENGTH	L			113/4.50	124/4.87	188/7.37	199/7.87	228/9.00	236/9.25	258/10.30	291.5/11.66	370/14.56	420/16.53	423/16.6	504/19.8
VOL. CONTROL CHAMBER	CC / GAL			36/0.01		180/0.04		250/0.05		400/0.11		1110/0.29			
WEIGHT	KG / LBS			0.2/0.44		0.9/2		1.2/2.6	1.4/3.1	3.1/6.8	2/4.4	5.95/13.1	7.95/17.5	13.2/29.1	

\* Dimensions for those diameters include flanges



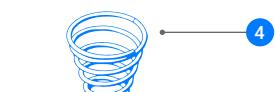
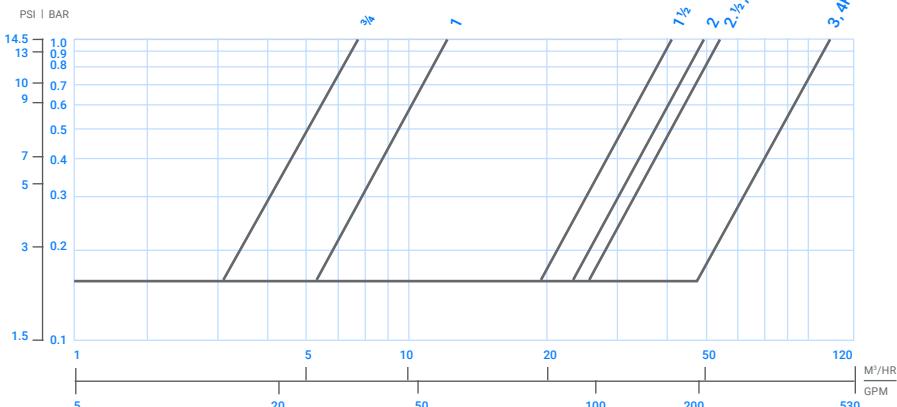
## → MATERIAL SPECIFICATIONS

#	PART	MATERIAL	OPTIONAL
1	BODY	REINFORCED NYLON	POLY-PROPYLENE
2	BONNET	REINFORCED NYLON	POLY-PROPYLENE
3	DIAPHRAGM*	NATURAL RUBBER	ALD70
4	SPRING	SST 302	SST 316

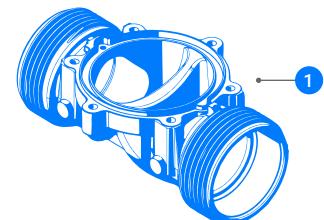
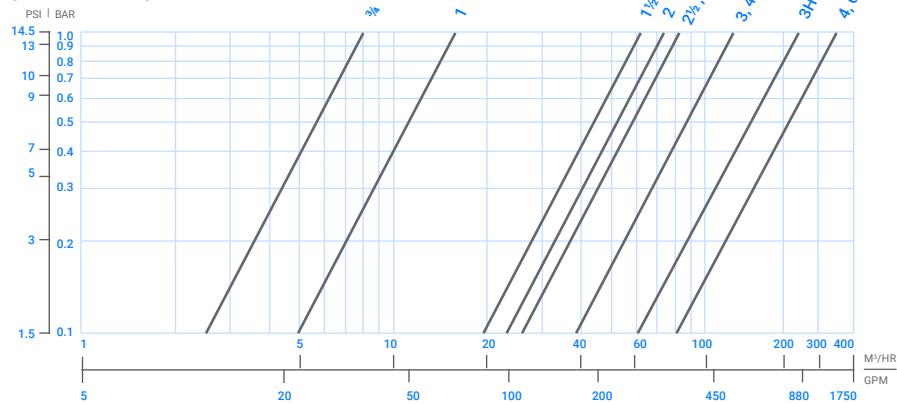
\* Optional parts for special chemical resistance

## → HEAD LOSS

### 2 WAY VALVES



### 3 WAY VALVES



# 75 SERIES 3"H - 6"R CONTROL VALVES

The NEW S75 with renewed design innovation provides the highest hydraulic performance for all of your valve applications.



Outstanding Performances



Ultimate Durability



Extremely Versatile

## Benefits & Features

### → Outstanding performance

New innovative body design provides optimal flow characteristics for both flow and head loss. In addition, the valve reaction times are dramatically improved, enhancing in-field experience

### → Ultimated durability

Improved corrosive resistant material composition provides for a wide range of hydraulic applications while also delivering higher pressure ratings than ever before, up to 12 bar

### → Extremely versatile

We listened to you, our customer. The S75 design is adaptable to multiple applications of valve sizing and connection type. Whether your application is 3" Threaded or 6" Flange, we can connect to it. The need to store multiple valve sizes is reduced

## Applications

- The NEW 3"H, 4" and 6"R models were engineered to operate in the widest pressure ranges possible for optimal control and precision. The NEW S75 are ideal for large scale irrigation projects in field crops, vineyards, or orchards.

## → CONNECTION TYPES



## → CATALOG NUMBERS

DESCRIPTION	CATALOG NUMBER
<b>Basic Valves</b>	
S75PL 3"H H NPT BAS 3W	71600-003351
S75PL 3"H H BSP BAS 3W	71600-003352
S75PL 4" H UNF BAS 3W	71600-051098
S75PL 6"R H UNF BAS 3W	71600-051099
<b>Electric Valves</b>	
S75PL 3"H H BSP AQDC 3WNC	71600-003353
S75PL 3"H H NPT AQDC 3WNC	71600-003354
S75PL 3"H H BSP AQAC 3WNC	71600-003356
S75PL 3"H H NPT AQAC 3WNC	71600-003355
S75PL 4" H UNF ELE AQDC 3WNC	71640-005522
S75PL 4" H UNF ELE AQAC 3WNC	71640-002342
S75PL 6" R H UNF ELE AQDC 3WNC	71640-007085
S75PL 6" R H UNF ELE AQAC 3WNC	71640-007086
<b>Pressure Reducing Valves</b>	
S75PL 3"H H NPT PRV PPY 3W CS	71600-003357
S75PL 3"H H BSP PRV PPY 3W CS	71600-003358
S75PL 3"H H NPT PRV PPY AQDC 3WNC C	71600-003359
S75PL 3"H H BSP PRV PPY AQDC 3WNC C	71600-003360
S75PL 3"H H BSP PRV PPY AQAC 3WNC C	71600-003361
S75PL 3"H H NPT PRV PPY AQAC 3WNC C	71600-003362
S75PL 4" H UNF PRV PPY 3W CS	71600-051096
S75PL 4" H UNF PRV PPY AQDC 3WNC C	71640-002343
S75PL 4" H UNF PRV PPY AQAC 3WNC C	71640-002344
S75PL 6" R H UNF PRV PPY 3W CS	71600-052600
S75PL 6" R H UNF PRV PPY AQDC 3WNC C	71640-007087
S75PL 6" R H UNF PRV PPY AQAC 3WNC C	71640-007088
<b>Pressure Sustaining Valves</b>	
S75PL 4" H UNF PSV PPG AQDC 3WNC C	71640-005598
S75PL 4" H UNF PSV PPG AQAC 3WNC C	71640-005591
S75PL 6" R H UNF PSV PPG AQDC 3WNC C	71640-007091
S75PL 6" R H UNF PSV PPG AQAC 3WNC C	71640-007092

# 75 SERIES 6" - 8"R CONTROL VALVES

The strong and versatile 75 series, is renewing with 6" & 8"R valves that exhibits high-end hydraulic performances. The valve provides high flow rates while operating at low head losses for better irrigation management.



Outstanding Performances



Ultimate Durability



Light & Compact

## Benefits & Features

### → Outstanding performance

Higher flow capacity and very low head losses achieved by a uniquely designed flexible diaphragm that provides a wide water passage throughout the valve's hydrodynamic body

### → Ultimate durability

Long life and easy inline maintenance accomplished by simple & robust structure and high-quality corrosion-free materials

### → Light & compact

Super compact structure and minimal parts makes it simple to install and maintain

## Applications

- The new 6" and 8"R plastic valve designed to operate in versatile pressures ranges for optimal control of large scale irrigation plots in field crops, vineyards and orchards with various control features.

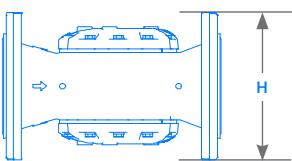
## → HYDRAULIC PERFORMANCE

DIAMETER	METRIC	US
MAX. CONTINUOUS FLOW	350 M <sup>3</sup> /H	1540 GPM
MAX. INTERMITTENT FLOW	955 M <sup>3</sup> /H	4200 GPM
MIN. PRESSURE	0.5 BAR	7 PSI
MAX. PRESSURE	12 BAR	175 PSI
MAX. TEMPERATURE	60°C	140°F
KV / CV	580	690

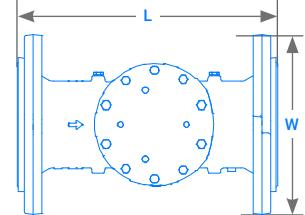
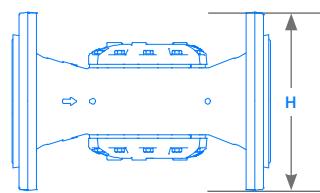
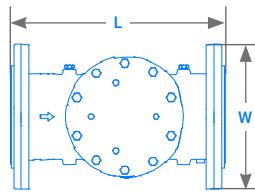
## → TECHNICAL DIMENSIONS

DIAMETER	6"		8"R		
	METRIC	US	METRIC	US	
HEIGHT	H	142	5.6	173	6.8
WIDTH	W	285	11.22	347	13.7
LENGTH	L	423	16.6	504	19.8
VOLUME CONTROL CHAMBER		1100 CC	0.29 GAL.	1100 CC	0.29 GAL.
WEIGHT		10.4 KG	22.9 LBS.	13.2 KG	29.1 LBS.

6"



8"R



## → MATERIAL SPECIFICATION

#	PART	MATERIAL
1	BODY	GRP
2	NUT	BRASS
3	DIAPHRAGM*	NR
4	SPRING DISC	GRP
5	SPRING	SST
6	BONNET	GRP
7	WASHER	SST
8	BOLT	SST

# 80 SERIES REINFORCED NYLON CONTROL VALVES

Globe and angle plastic valves of the 80 series, equipped with a fully supported diaphragm, guarantee rapid and precise control of irrigation systems.



Optimal Protection



Efficient Installation



Extensive Flexibility

## Benefits & Features

### → Optimal protection

Tight closing & quick opening is achieved by a rigid plug mechanism that is suitable for high pressure applications and responds rapidly to water pressure fluctuations

### → Efficient installation

The valves are available in both globe and angle shapes and therefore eliminate the use of elbow joints and extending pipelines

### → Extensive flexibility

Available with full range of control functions, various end connections and a selection of 2 way and 3 way bonnets with integral accessories

## Specifications & Recommendations

- Maximum pressure – 10 bar (145 psi)
- Minimum recommended flow – 1 m<sup>3</sup>/h(5 gpm)
- Minimum operating pressure – 0.7 bar (10 psi)
- Maximum operating temperature – 70°C (160°F)

## → HYDRAULIC PERFORMANCE

SHAPE		STRAIGHT		ANGLE			
DIAMETER	INCH	1½	2	1½	2	3	4R*
	MM	40	50	40	50	80	100
FLOW RATE FACTOR**	KV	45	55	45	60	145	
	CV	55	65	55	70	170	

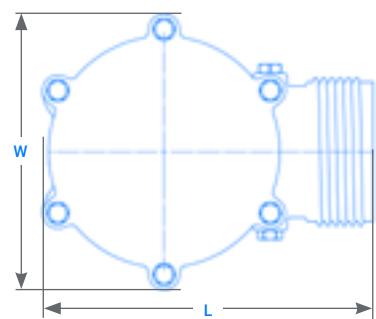
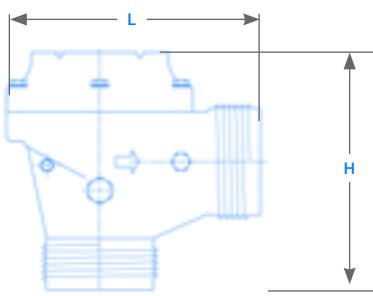
\* R - "Reduced" - 4R = 43"

\*\* In order to calculate the head loss at any desired flow rate, use the following equation: Head loss = (Flow rate/Flow rate factor)<sup>2</sup>

## → TECHNICAL DIMENSIONS

SHAPE		STRAIGHT		ANGLE			
DIAMETER	INCH	1½	2	1½	2	3	4R*
	MM	40	50	40	50	80	100
HEIGHT	H	MM / INCH	145 / 5.70	145 / 5.70	66 / 2.59	66 / 2.59	130 / 5.11
WIDTH	W	MM / INCH	127 / 5.00	127 / 5.00	127 / 5.00	127 / 5.00	195 / 7.67
LENGTH	L	MM / INCH	165 / 6.49	165 / 6.49	88 / 3.46	88 / 3.46	160 / 6.29
VOL. CONTROL CHAMBER	CC / GAL	100 / 0.02	100 / 0.02	100 / 0.02	100 / 0.02	400 / 0.10	400 / 0.10
WEIGHT	KG / LBS	0.9 / 2	0.9 / 2	0.8 / 1.8	0.8 / 1.8	3.8 / 8.3	4.2 / 9.2

\* Dimensions for those diameters include flanges

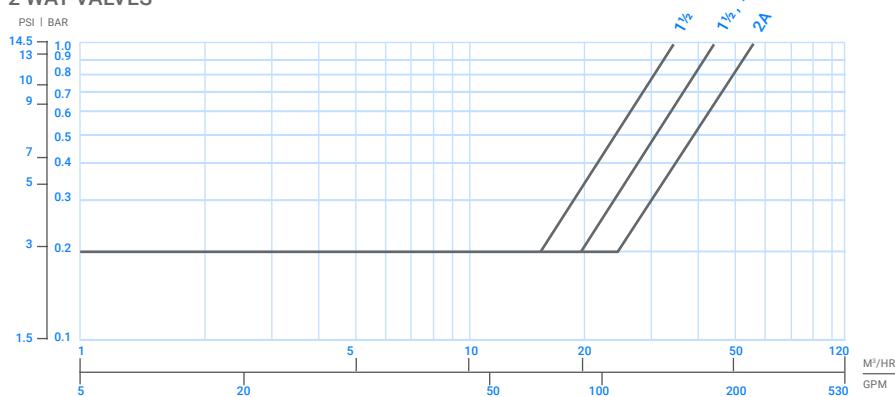


## → MATERIAL SPECIFICATIONS

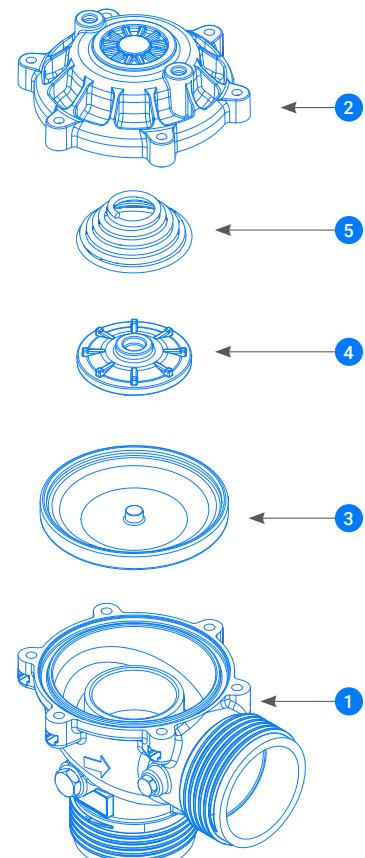
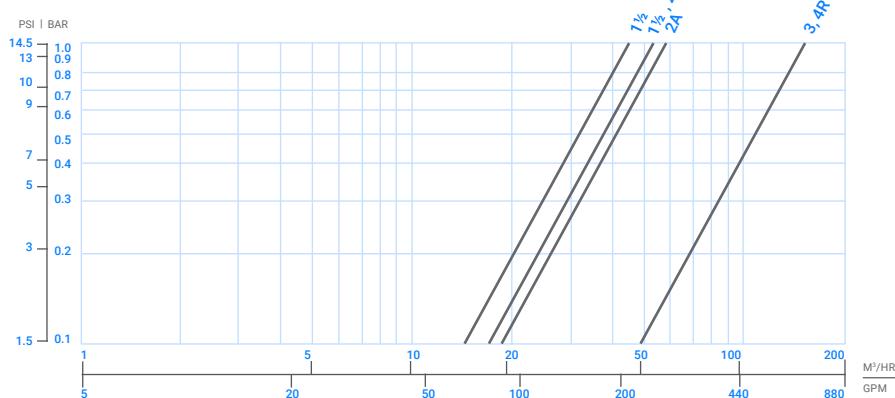
#	PART	MATERIAL
1	BODY	REINFORCED NYLON
2	BONNET	REINFORCED NYLON
3	DIAPHRAGM*	NATURAL RUBBER
4	SPRING SEAT	NITRILE RUBBER
5	SPRING	SST 302

## → HEAD LOSS

### 2 WAY VALVES



### 3 WAY VALVES



# 80 QR SERIES REINFORCED NYLON CONTROL VALVE

The 80QR is a pilot-operated, universal surge-relief valve, that is designed for the pressure-surge protection of pumps, filtration systems and pipelines.



Outstanding Performances



Ultimate Durability



Extremely Versatile

## Benefits & Features

- ✓ Fast opening and slow, regulated closure - prevents shattering and secondary surges
- ✓ Extremely accurate: will open and close at the same pressure setting
- ✓ Small, light-weight and easy to adjust with just a small key and applying small torque
- ✓ Provides relief setting-range from 1-10 bar / 15-150 psi

## → MATERIAL SPECIFICATION

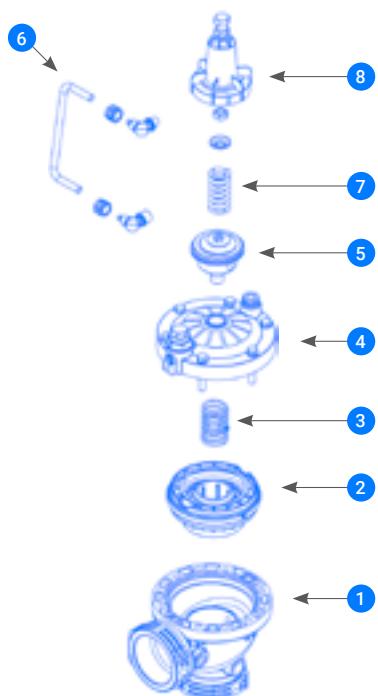
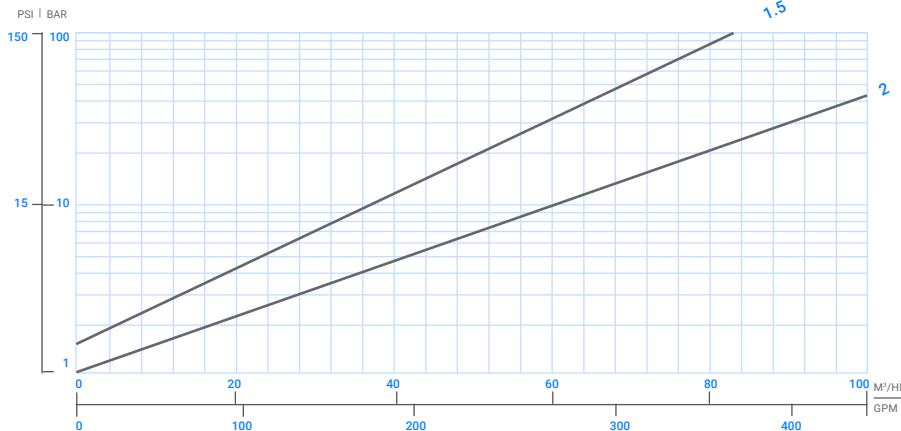
#	PART	MATERIAL*
1	BODY	GRP
2	DIAPHRAGM ASSEMBLY	GRP, NR
3	MAIN SPRING	SST
4	BONNET	GRP
5	PILOT-VALVE BASE	GRP, SST, NR
6	CONTROL TUBE	PP
7	ADJ. SPRING	SST
8	PILOT-VALVE BONNET	GRP

\* Optional parts for special chemical resistance

## Specifications & Recommendations

- Maximum pressure - 10 bar (145 psi)
- Maximum operating temperature - 60°C (140°F)

## → HEAD LOSS



# 80 W SERIES DUAL OUTLET CONTROL VALVE

Netafim presents the 80W - High quality dual valve, designed for agriculture applications. For a better affordability, ease of use and a durable construction.



Outstanding Performances



Ultimate Durability

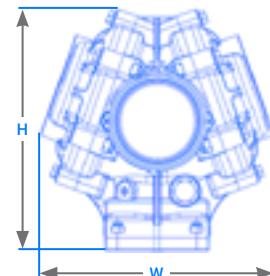
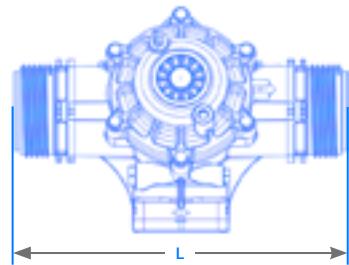


Extremely Versatile

## Benefits & Features

- ✓ Specially designed for irrigation when one or independent outlets are required
- ✓ Wide operation pressure range, from as low as 0.5 bar and up to 10 bar
- ✓ Designed for high flow rates while maintaining extremely low pressure losses
- ✓ Allows for a wide range of control applications

## → TECHNICAL DIMENSIONS



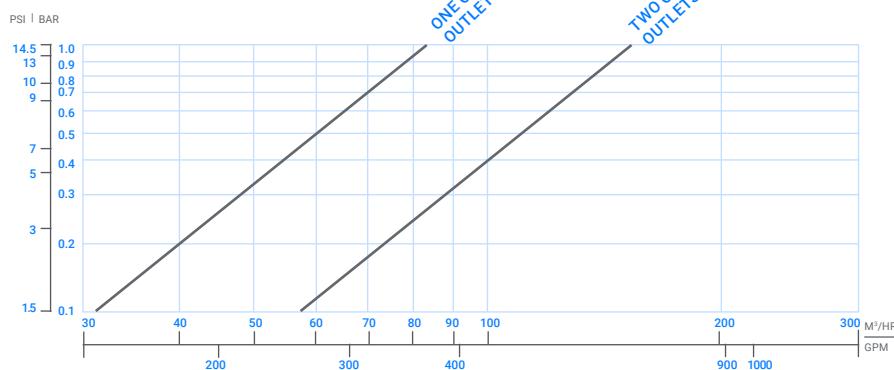
## Specifications & Recommendations

- Maximum pressure - 10 bar (145 psi)
- Minimum recommended flow - 1 m³/h (5 gpm)
- Minimum operating pressure - 0.4 bar (6 psi)
- Maximum operating temperature - 60°C (140°F)

## → HYDRAULIC PERFORMANCE

KV / CV TWO OPEN OUTLETS	M³/H @ 1 BAR	210
	GPM @ 1 PSI	242
KV / CV ONE OPEN OUTLET	M³/H @ 1 BAR	105
	GPM @ 1 PSI	121

## → HEAD LOSS



# 90 SERIES PVC CONTROL VALVES

**Exclusive valves series (3" – 6")  
suitable for underground and above-ground installation in open fields and greenhouses.**



Superior Performances



Exceptional Efficiency



Improved Resistance

## Benefits & Features

### → Superior performance

Excellent regulation capabilities achieved by a flexible diaphragm mechanism that is designed to allow maximal to near zero flow while operating at very low head losses

### → Exceptional efficiency

Available with full selection of control functions and various end connections. The optional underground installation reduces both costs and friction losses by eliminating the use of elbow joints

### → Improved resistance

Resistance to corrosive fluids is accomplished by using high quality corrosion-free materials, both externally and internally. Optional materials for highly concentrated chemicals protection

## Specifications & Recommendations

- Maximum pressure – 10 bar (145 psi)
- Minimum recommended flow – 1 m<sup>3</sup>/h(5 gpm)
- Minimum operating pressure - 0.3 bar (4 psi)
- Maximum operating temperature - 40°C (104°F)

## → HYDRAULIC PERFORMANCE

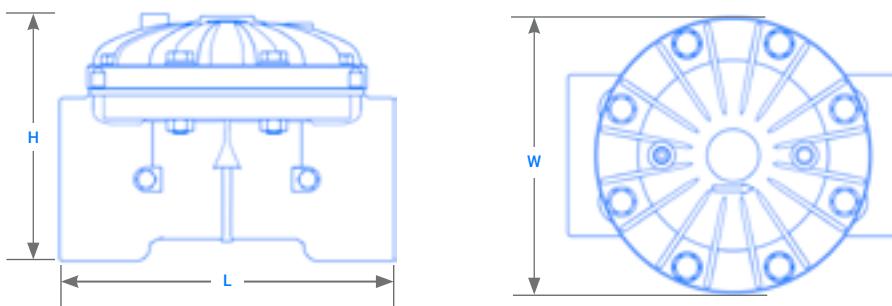
VALVE SIZE	INCH	3	4	6
	MM	80-90	100-110	150-160
FLOW RATE FACTOR*	KV	155	215	480
	CV	180	250	560

\* In order to calculate the head loss at any desired flow rate, use the following equation: Head loss = (Flow rate/Flow rate factor)<sup>2</sup>

## → TECHNICAL DIMENSIONS

DIAMETER	INCH	3	4	6
	MM	80-90	100-110	150-160
HEIGHT	H	MM / INCH	208 / 8.06	208 / 8.06
WIDTH	W	MM / INCH	229 / 9.16	229 / 9.16
LENGTH	L	MM / INCH	258 / 10.18	278 / 10.93
VOL. CONTROL CHAMBER	CC / GAL	681 / 0.18	681 / 0.18	2,575 / 0.68
WEIGHT	KG / LBS	4 / 8.8	4.2 / 9.2	11.8 / 26

\* PVC SW valves are 10mm larger than the pipe to allow solvent welding



## → MATERIAL SPECIFICATIONS

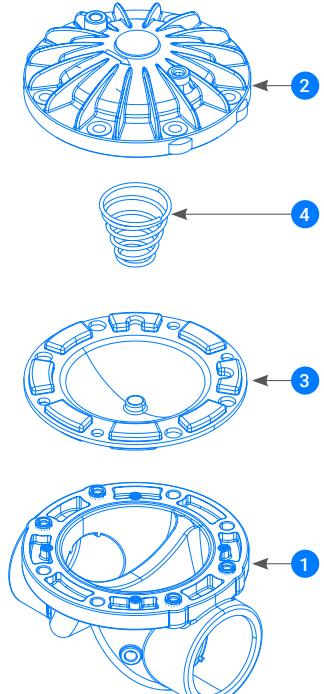
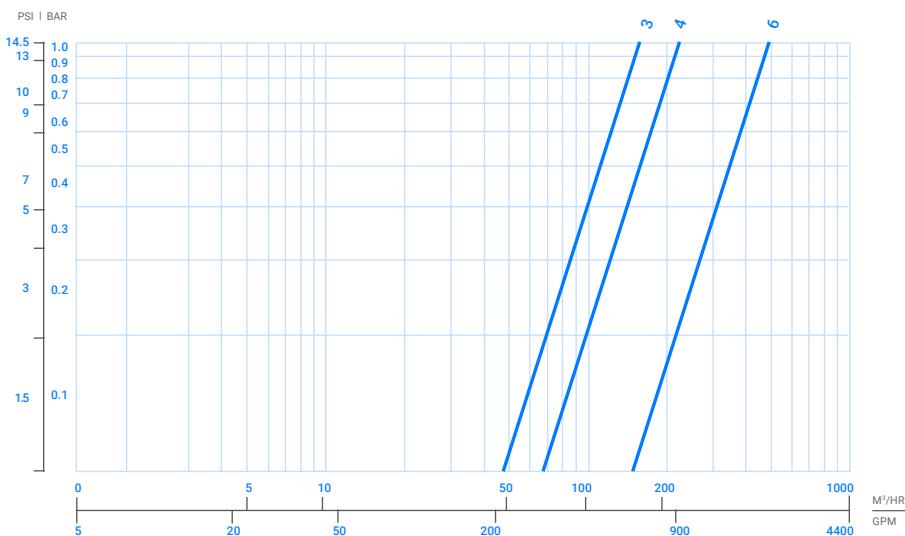
#	PART	MATERIAL	*OPTIONAL
1	BODY	UPVC	-
2	BONNET	GLASS REINFORCED POLYAMIDE	PPS
3	DIAPHRAGM**	NATURAL RUBBER	ALD, EPDM
4	SPRING	SST 302	SST 316

\* Optional parts for special chemical resistance

\*\* Wide selection of pressure ranges

## → HEAD LOSS

### 3 WAY VALVES



# 100 SERIES METAL CONTROL VALVES

The powerful and reliable metal valves of 100 series, display remarkable hydraulic performances and provide impeccable control of irrigation systems.



Outstanding  
Performances



Extremely  
Versatile



Ultimate  
Durability

## Benefits & Features

### → Outstanding performance

High flow capacity and very low head losses achieved by a flexible diaphragm that provides a wide water passage throughout the valve's hydrodynamic body

### → Extremely versatile

The valves are available in globe and angle shapes, with an extensive selection of materials, a full range of control functions and various end connections

### → Ultimate durability

Long life and easy inline maintenance accomplished by structural simplicity and the use of high-quality materials that can withstand the harshest conditions

## Specifications & Recommendations

- Maximum pressure - 16 bar (230 psi) and 25 bar (365 psi)
- Minimum recommended flow - 1m<sup>3</sup>/h (5 gpm)
- Minimum operating pressure - 0.4 bar (6 psi)

## → HYDRAULIC PERFORMANCE

SHAPE		STRAIGHT															ANGLE							
DIAMETER	Inch	¾	1	1½	2	2½	3R*	3	4	6	8R*	8	10	12	14	16	1½	2	2½	3R	3	4	6	
	MM	20	25	40	50	65	80	80	100	150	200	200	250	300	350	400	40	50	65	80	80	100	150	
FLOW RATE FACTOR**	KV	17	17	65	95	95	95	170	220	600	670	800	1250	1900	1900	2600	60	90	90	90	150	200	570	
	CV	20	20	75	110	110	110	200	255	695	775	925	1445	2195	2195	3005	70	105	105	105	175	230	660	

\* R – "Reduced" - 3R = 323", 8R = 868" \*\*. In order to calculate the head loss at any desired flow rate, use the following equation: Head loss = (Flow rate/Flow rate factor)<sup>2</sup>

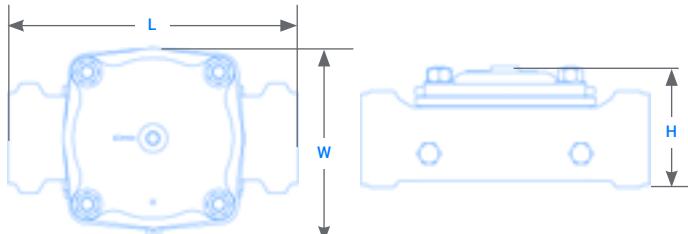
## → TECHNICAL DIMENSIONS STRAIGHT VALVES

CONNECTION		THREADED								FLANGED													
DIAMETER	Inch	¾	1	1½	2	2½	3R	3	1½	2	3R	3	4	6									
	MM	20	25	40	50	65	80	80	40	50	80	80	100	100	150								
HEIGHT	H	MM/INCH	43/1.69	52/2.05		93/3.66	115/4.53	118/4.65	126/4.96	135/5.31	153/6.02		166/6.54	202/7.95		200/7.87	230/9.06		314/12.36				
WIDTH	W	MM/INCH	68/2.68	68/2.68			112/4.41	112/4.41		200/7.87	76.5/3.01		200/7.87						300/11.8				
LENGTH	L	MM/INCH	115/4.53	120/4.72	170/6.69	188/7.4	219/8.62	225/8.86	316/12.44	186/7.32		200/7.87		285/11.2	305/12.01	390/15.35							
VOL. CONTROL CHAMBER	CC/GAL	30/0.007		70/0.0168		160/0.04		600/0.15		70/0.0168		160/0.04		600/0.15		1800/0.50							
WEIGHT	KG/LBS	1/2.2		2.2/4.9		3.2/7		3.6/7.9		4.5/9.9		11/24		5.8/13		7.2/15.8		11/24.3		17/37.5		22/48.5	

\*Flanged valves are available at all diameters (¾" - 24") – contact Netafim representative if any additional data is required

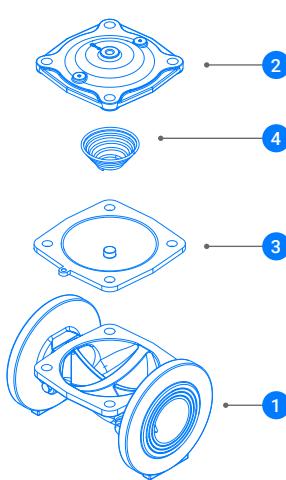
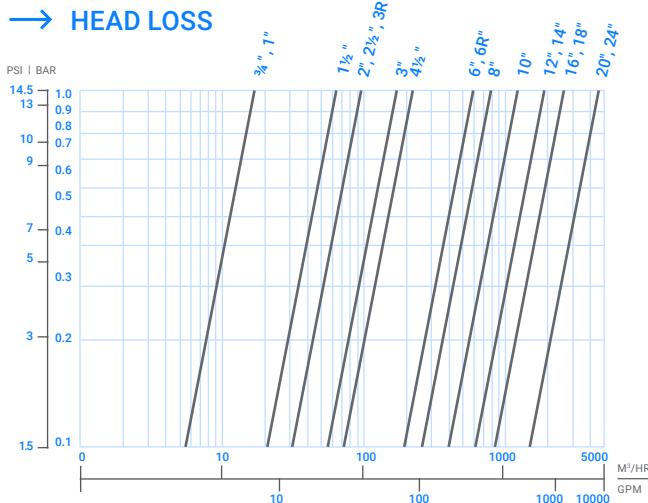
## ANGLE VALVES

CONNECTION		THREADED						VICTAULIC		FLANGED											
DIAMETER	Inch	1½	2	3R	3	3	4	3	4	6											
	MM	40	50	80	80	80	100	80	100	100	150										
HEIGHT	H	MM / INCH	75 / 2.95	90 / 3.54	114 / 4.49	145 / 5.71	170 / 6.69	185 / 7.28	174 / 6.85	185 / 7.28	230 / 9.06										
WIDTH	W	MM / INCH	93 / 3.66	112 / 4.41	112 / 4.41	200 / 7.87	200 / 7.87	200 / 7.87	200 / 7.87	200 / 7.87	230 / 9.06										
LENGTH	L	MM / INCH	75 / 2.95	90 / 3.54	114 / 4.49	145 / 5.71	170 / 6.69	185 / 7.28	174 / 6.85	185 / 7.28	230 / 9.06										
VOL. CONTROL CHAMBER	CC / GAL	70 / 0.0168		160 / 0.04		160 / 0.04		600 / 0.15		600 / 0.15		600 / 0.15		600 / 0.15		1800 / 0.50					
WEIGHT	KG / LBS	1.7 / 3.7		2.4 / 5.3		3.6 / 7.9		10.8 / 23.8		10.5 / 23.1		11.5 / 25.4		18 / 39.70		21 / 46.30		45 / 99.20			



## → MATERIAL SPECIFICATIONS

#	PART	MATERIAL	*OPTIONAL
1	BODY	CAST IRON	DUCTILE IRON, BRONZE, STAINLESS STEEL
2	BONNET	CAST IRON	DUCTILE IRON, BRONZE, STAINLESS STEEL
3	DIAPHRAGM**	NATURAL RUBBER	NBR, EPDM, NEOPRENE
4	SPRING	SST 302	SST 316



# TYPICAL APPLICATIONS

## Manual Control On/Off



### MAN

The valve is controlled manually by a three port selector that allows the user to select the closed, opened or remotecontrolled position of the valve. Opening and closing the valve is quick and effortless, even under high pressure conditions.

## Hydraulic Control On/Off



### HYD

A 3-way relay valve, activated by hydraulic or pneumatic pressure command, opens or closes the main valve. The standard valve is supplied in the "normally closed" position. The "normally open" position is optional. Hydraulic activation can be added to other control applications on request.

## Electric Control On/Off



### ELE

A 3-way solenoid valve, activated by an electric current or an electric pulse, opens or closes the main valve. The standard valve is supplied in the "normally closed" position. The "normally open" position is optional. Electric activation can be added to other control applications on request.

## Pressure Reducing



### PRV

The valve maintains a preset downstream pressure, regardless of upstream pressure or flow rate fluctuation. The main valve is controlled by either a 3-way pilot valve (allowing full opening when upstream pressure drops below the pressure set-point), or by a 2-way pilot valve (creating a minimal differential in open position).

## Pressure Sustaining (and relief)



### PSV

The valve maintains upstream pressure, regardless of flow rate variations. The valve will be in the "closed" position if the upstream pressure drops below the set-point and will fully open when the upstream pressure exceeds the set-point.

## Quick Relief



### QRV

The valve opens instantly when the pressure in the pipeline exceeds the safe level, thus relieving excessive pressure from the network. When the pressure returns to normal, the valve closes slowly, at an adjustable pace.

## Flow Control



### FLV

The valve limits the flow rate in the network to a preset value regardless of upstream pressure variations. The valve fully opens when the flow rate drops below the set point.

## Level Control



### LCV

The main valve is controlled by a float valve, located in the tank or reservoir and set at the required maximum water level. The valve maintains the maximum level continuously.

## Surge Anticipating



### SAV

The valve protects the pumping system from water hammer, caused by sudden pump shut-off (case of power failure, for example). The valve is assembled on a T-junction of the main pipeline, instantly opens when the pump stops, relieving the returning high pressure wave. The valve slowly closes once the pressure returns to the static level. The valve also functions as a pressure relief valve.

## Pump Control



### PCV

The valve eliminates damaging surges caused by pump start-up and shut-off. The electrically activated valve gradually opens on pump start up, and slowly closes before the pump is switched off. The valve will automatically close drip tight in case of power failure. Optional Additions: Flow Rate Limitation, Extended Closure, Two Stage Operating, Pressure Reducing and Pressure Sustaining.

# PILOTS, SOLENOIDS & HYDRAULIC RELAYS

## → PLASTIC PILOTS

PRESSURE RATING: 10 BAR / 145 PSI

				29-100	3-Way pressure reducing
29-100	29-10R	29-200	29-310	29-10R	3-Way pressure reducing
29-200				29-200	3-Way multi purpose (Pressure reducing and sustaining)
				29-310	3-Way differential multi purpose (Flow control, differential pressure reducing)

## → METAL PILOTS

PRESSURE RATING: 10 BAR / 145 PSI

				31-310	3-way multi purpose (pressure reducing and sustaining)
31-310	31-10F	76-200	68-410	31-10R/S/F	3-way multi purpose (pressure reducing and sustaining) and flow control
				76-200	3 way differential multi purpose (flow control, differential pressure sustaining)
				68-410/510	2-way (pressure reducing and sustaining)

## → SOLENOIDS

PRESSURE RATING: FROM 10 BAR/145 PSI TO 25 BAR/360 PSI

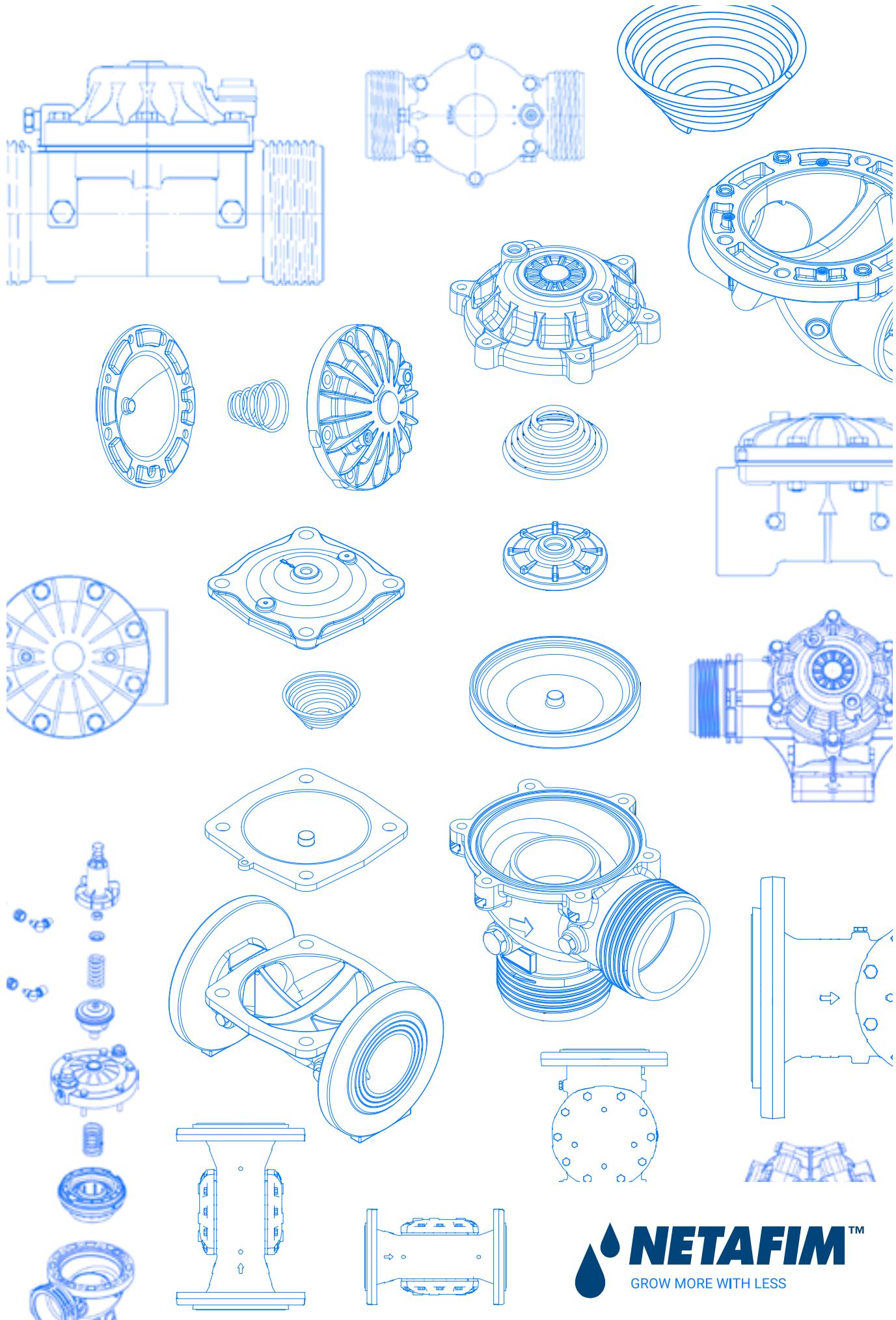
OPERATING VOLTAGE: AC: 24V, DC: 12V-24V, DC LATCH: 7.5V-30V

				D2	2-Way NC Solenoid
D2	AQUATIVE AC/DC	B2	B3	AQUATIVE AC/DC	3-Way NC or NO Solenoid
				B2	2-Way NC or NO Solenoid
				B3	3-Way NC or NO Solenoid

## → RELAYS

PRESSURE RATING: FROM 10 BAR/145 PSI TO 25 BAR/360 PSI

				25-300	3-way / 2 positions NO w. 3/8"
25-300	GALIT	66-210	28-800	GALIT	3-way / 2 positions NC or NO
				66-210	3-way / 2 positions NC or NO
				28-800	2-way / 2 positions



# 29-50M MULTI-PURPOSE, 3-WAY REINFORCED PLASTIC PILOT-VALVE

The 29-50M is a 3-way, diaphragm actuated, spring-loaded pilot-valve that is designed for control of pressure-regulating hydraulic-valves. The pilot valve operates as a selector between the common port and the two other ports.

The pilot valve will vent, pressurize or lock the hydraulic valve's chamber as a factor of the relation between the regulated pressure and the adjusted set-value.

The 29-50M pilot-valve can be used for implementing wide range of hydraulic control-functions.



## Benefits & Features

- ✓ 3-way pilot valve enabling the lowest-possible pressure-losses
- ✓ Easy & simple hand-operated setting with no tools required
- ✓ Protected from indeliberate adjustment by a 'medicine-cap' locking mechanism
- ✓ Calibration-scale allowing proper adjustment and visual indication of the adjusted value
- ✓ Made of the toughest corrosion-proof & glass-reinforced composite materials
- ✓ Calibration-scale allowing adjustment and visual indication of the adjusted value
- ✓ Pressure-balanced as Pressure Reducing – the set value is unaffected by upstream pressure variations
- ✓ ID Plate with port-markings, for easy connection, assembly and maintenance
- ✓ Dual orientation "Snap" mechanism for an easy & robust connection to the main control-valve
- ✓ Same pilot valve can be used for various control functions by simply changing the way it is connected to the valve

## Typical Applications

- Pressure reducing valves - PR
- Pressure sustaining valves - PS
- Topography-compensating, remote hydraulic-control - RC

## → TECHNICAL DATA

### GENERAL

PRESSURE RATING	10 BAR / 150 PSI
PRESSURE ADJUSTMENT RANGE	0.3-7.5 BAR / 5-125 PSI
FLUID TEMPERATURE	50°C MAX / 120°F MAX
WEIGHT	0.17 KG / 0.37 LBS

### SPRING ADJUSTMENT RANGE

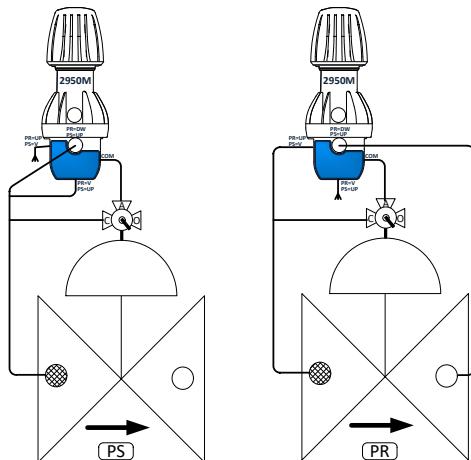
SPRING #	COLOR	BAR	PSI
72	YELLOW	0.3 - 3	4 - 40
54	GREEN	0.5 - 4.5	7 - 65
65	RED	1 - 7.5	15 - 110

### MATERIAL SPECIFICATIONS

PART NAME	MATERIAL
BODY & BONNET	PA-GF
ELASTOMERS	EPDM
INTERNAL PARTS	SST+PTFE
SPRING	SST

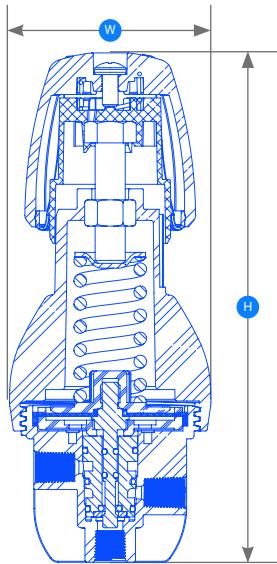
### CONNECTIONS

PORT	PRESSURE REDUCING	PRESSURE SUSTAINING
UP	UPSTREAM	UPSTREAM
UP	-	UPSTREAM
DW	DOWNSTREAM	-
COM	VALVE CTRL. CHAMBER	VALVE CTRL. CHAMBER
VENT	VENT	VENT



### DIMENSIONS

H (HEIGHT) MAX.	247 MM / 9.72"
W (WIDTH)	95 MM / 3.74"
CONTROL PORTS	NPT 1/8"



## → CATALOG NUMBERS

DESCRIPTION	CATALOG NUMBER
29-50M PILOT WITH YELLOW SPRING	71680-051268
29-50M PILOT WITH GREEN SPRING	71680-051269
29-50M PILOT WITH RED SPRING	71680-051270
INTERNAL PARTS KIT	71680-001030

# DESCRIPTION GUIDE

## SAMPLE DESCRIPTION

<b>1 SERIES</b>	<b>S100<sup>1</sup> CI<sup>2</sup> 6"<sup>3</sup> A<sup>4</sup> DN16<sup>5</sup> PRS<sup>6</sup> MP<sup>7</sup> GR<sup>8</sup> AQAC<sup>9</sup> 3WNC<sup>10</sup> PH<sup>11</sup></b>	
S75	75 PLASTIC	
S75T	75PL+THROTTLE	
S80	80 PLASTIC	
S80T	80PL+THROTTLE	
S80V	80 "T" ONE CHAMBER	
S80W	80 "T" DUAL CHAMBER	
S90	90 PVC	
S100	100 METAL	
S300	300 METAL	
S500	500 METAL	
<b>4 CONFIGURATION</b>		
H	HORIZONTAL	
A	ANGLE	
<b>6 MAIN FUNCTION</b>		
BAS	BASIC	
MAN	MANUAL CONTROL ON/OFF	
HYD	HYDRAULIC CONTROL ON/OFF	
ELE	ELECTRIC CONTROL ON/OFF	
PRV	PRESSURE REDUCING	
PSV	PRESSURE SUSTAINING (& RELIEF)	
PRS	PRESSURE REDUCING & SUSTAINING	
FLV	FLOW CONTROL	
QRV	QUICK RELIEF	
LCV	LEVEL CONTROL	
SAV	SURGE ANTICIPATING	
TOV	PRESSURE REDUCING, TWO STAGE OPENING	
TSV	PRESSURE REDUCING, TWO SETS OF PRESSURE	
PCV	PUMP CONTROL VALVE	
<b>9 SOLENOID TYPE</b>		
AQAC	SOLENOID AQAUTIVE 24AC	
AQDC	SOLENOID AQAUTIVE 12-40VDC LATCH	
D24A	DOROT SOLENOID 24VAC	
D24D	DOROT SOLENOID 24VDC	
D12D	DOROT SOLENOID 12VDC	
D12L	DOROT SOLENOID 12VDC LATCH	
24AC	OTHER SOLENOID 24VAC	
24DC	OTHER SOLENOID 24VDC	
12DC	OTHER SOLENOID 12VDC	
12DL	OTHER SOLENOID 12VDC LATCH	
<b>10 VALVE'S MODE</b>		
3WNC	3-WAY N.C	
2WNC	2-WAY N.C	
3WNO	3-WAY N.O	
2WNO	2-WAY N.O	
2W	2-WAY*	
3W	3-WAY*	
* MANUAL AND HYDRAULIC CONTROL ONLY		
<b>11 ACCESORIES</b>		
C/2C	CHECK POINT (1 UNIT, 2 UNIT)	
P/2P	PRESSURE GAUGE (1 UNIT, 2 UNIT)	
H	HYDRAULIC RELAY	
F	FLOAT	
O	ORIFICE	
T	SHUTTLE T	
N	NON-RETURN FEATURE	
S	3 WAY MANUAL VALVE	
LP	LOW PRESSURE DIAPHRAGM	
HP	HIGH PRESSURE DIAPHRAGM	

# STANDARDS TABLE

VALVE			ACCESSORIES				
FUNCTION	TYPE	PRESSURE GRADE	PILOT	CHECK POINT		PRESSURE GAUGE	
				UPSTREAM	DOWNSTREAM	UPSTREAM	DOWNSTREAM
PRESSURE REDUCING VALVE	PLASTIC UP TO 4"R	PN-10	29-100		✓		
	PLASTIC 4" & UP	PN-10	29-50M		✓		
	METAL UP TO 6"	PN-10	29-100		✓		
	METAL 8" & UP	ALL STANDARDS	31-310 31-10R (3W) 68-410 (2W) * CHECK POINT ONLY				✓
PRESSURE SUSTAINING VALVE	PLASTIC UP TO 4"R	PN-10	29-200	✓			
	PLASTIC 4" & UP	PN-10	29-50M	✓			
	METAL UP TO 6"	PN-10	29-200	✓			
	METAL 8" & UP	ALL STANDARDS	31-10S			✓	
PRESSURE REDUCING & SUSTAINING VALVE	PLASTIC UP TO 4"R	PN-10	29-100 + 29-200	✓	✓		
	PLASTIC 4" & UP	PN-10	29-50M	✓	✓		
	METAL UP TO 6"	PN-10	29-100 + 29-200	✓	✓		
	METAL 8" & UP	ALL STANDARDS	31-10R + 31-10S			✓	✓
QUICK RELIEF VALVE	PLASTIC UP TO 4"R	PN-10	29-500	✓			
	METAL UP TO 4"	PN-16	68-215	✓			
	METAL 6" & UP	PN-16	68-510			✓	
CONTROL TUBES	8MM PE TUBE	All PN-10 Valves or valves with Plastic pilot supplied with 8mm PE tubes					
	PARKER TUBE	All PN-16 Valves or valves with Metal pilot supplied with Parker tubes (other tubing options - upon request)					

## → PILOTS

	29-100	29-10R	29-200	29-50M	29-500	68-215	31-10R/S	31-310
PILOT								
PRESSURE RANGE BAR (PSI)	0.3-3.5 (4.5-50)	0.5-4.5 (7-65)	0.3-3.5 (4.5-50)	0.3-3 (4-40)	1-8 (15-115)			0.3-6 (4.5-90)
	0.5-5 (7-70)	0.5-5.5 (7-80)	0.5-5 (7-70)	0.5-4.5 (7-65)	1-10 (15-150)	0.8-13 (10-190)	0.5-6 (7-85)	0.5-10 (7-150)
	1-8 (15-115)	1-8.5 (15-125)	1-8 (15-115)	1-7.5 (15-110)		2-40 (30-580)	1.5-12 (22-175)	0.6-15 (9-220)

→ CATALOG NUMBERS FOR MAIN PRODUCTS (ADDITIONAL DIAMETERS, CONNECTION TYPES AND FUNCTIONS ARE AVAILABLE UPON REQUEST)

## 75 Series

DIAM.	CONN. TYPE	FUNCTIONS						
		ELECTRIC AC	ELECTRIC DC	PRESSURE REDUCING	ELECTRIC AC & PRESSURE REDUCING	ELECTRIC DC & PRESSURE REDUCING	PRESSURE SUSTAINING	PRESSURE REDUCING & SUSTAINING
2"	THR. BSP	71640-002115	71640-001582	71600-008795	71640-003401	71640-003411	71600-002292	71600-010610
3"R	THR. BSP	71640-004430	71640-004181	71600-009150	71640-016505	71640-007175	71600-011000	71600-050654
3"	THR. BSP	71640-002265	71640-005139	71600-003546	71640-002152	71640-005137	71640-002161	71600-010975
	UNI. FLN.	71640-002154	71640-002153	71600-003541	71640-002166	71640-002167	71600-035966	71600-003438
4"R	UNI. FLN.	71640-005593	71640-005524	71600-004241	71640-016520	71640-005592	71600-035870	71600-051095
4"	UNI. FLN.	71640-002342	71640-005522	71600-051101	71640-007182	71640-007183	71600-051093	71600-051102
6"R	UNI. FLN.	71640-007086	71640-007085	71600-052606	71640-007094	71640-005835	71600-052600	71600-003712

\*\* Electric valves are in 3-way mode. Standard valve are without throttling handles (unless specified)

## 80 Series

DIAM.	SHAPE	CONNECTION TYPE	FUNCTIONS					
			ELECTRIC AC	ELECTRIC DC	PRESSURE REDUCING	ELECTRIC AC & PRESSURE REDUCING	ELECTRIC DC & PRESSURE REDUCING	QUICK RELIEF
1½"	STRAIGHT	THR. BSP	71640-001150	71640-001131	71600-050153	71640-001151	71640-001152	71600-050154
	ANGLE		71640-001132	71640-007610	71600-050151	71640-001133	71640-001134	71600-000374
2"	STRAIGHT	THR. BSP	71640-003455	71640-014420	71600-008812	71640-014427	71640-007681	71600-050701
	ANGLE		71640-003456	71640-014400	71600-050343	71640-003404	71640-014390	71600-000365
3"	ANGLE	THR. BSP	71640-004990	71640-018221	71600-009475	71640-004810	71640-002145	71600-013442
	UNI. FLN.		71640-004992	71640-017034	71600-051015	71640-005176	71640-004991	71600-013443
4"R	ANGLE	UNI. FLN.	71640-018241	71640-018242	71600-051110	71640-018240	71640-005196	71600-051120

\* Electric valves of diameters 1½" & 2" are 2-way

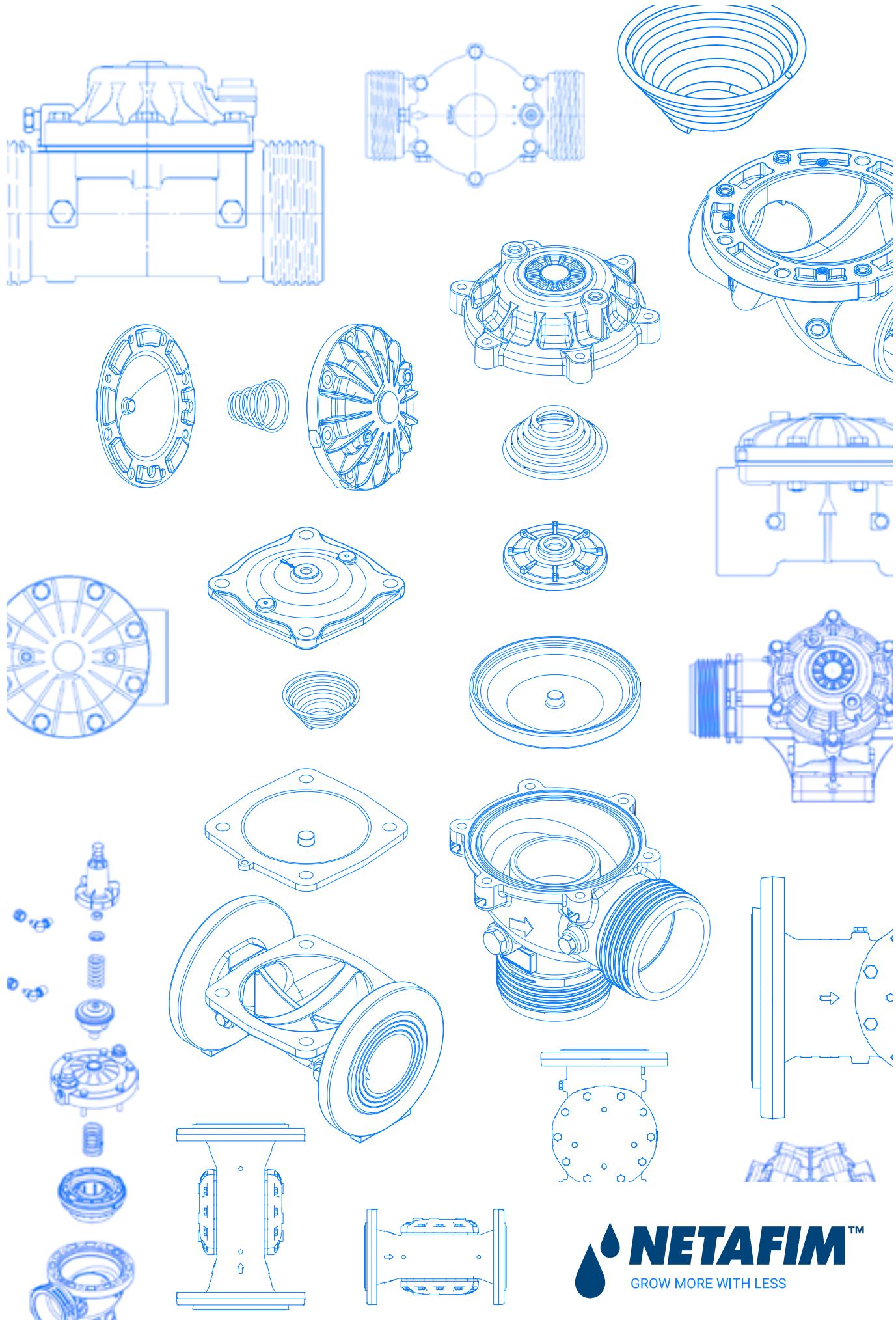
## 90 Series

DIAM.	FUNCTIONS						
	MANUAL	ELECTRIC AC	ELECTRIC DC	PRESSURE REDUCING	ELECTRIC AC & PRESSURE REDUCING	ELECTRIC DC & PRESSURE REDUCING	PRESSURE SUSTAINING
3"	71600-005400	71640-005060	71640-005065	71600-035990	71640-016530	71640-016530	71600-011250
4"	71610-018415	71640-005520	71640-005526	71600-006053	71640-016540	71640-005521	71600-035880
6"	71600-006150	71640-005961	71640-005950	71600-006193	71640-016550	71640-005771	71600-035890
90	71600-005500	71640-005055	71640-018108	71600-005745	71640-018102	71640-005074	71600-012485
110	71600-006000	71640-011070	71640-005516	71600-005790	71640-018103	71640-018101	71600-006052
160	71600-005870	71640-005910	71640-011080	71600-012475	71640-005094	71640-005915	71600-012479

\* Data is referring to valves with solvent welded end-connections

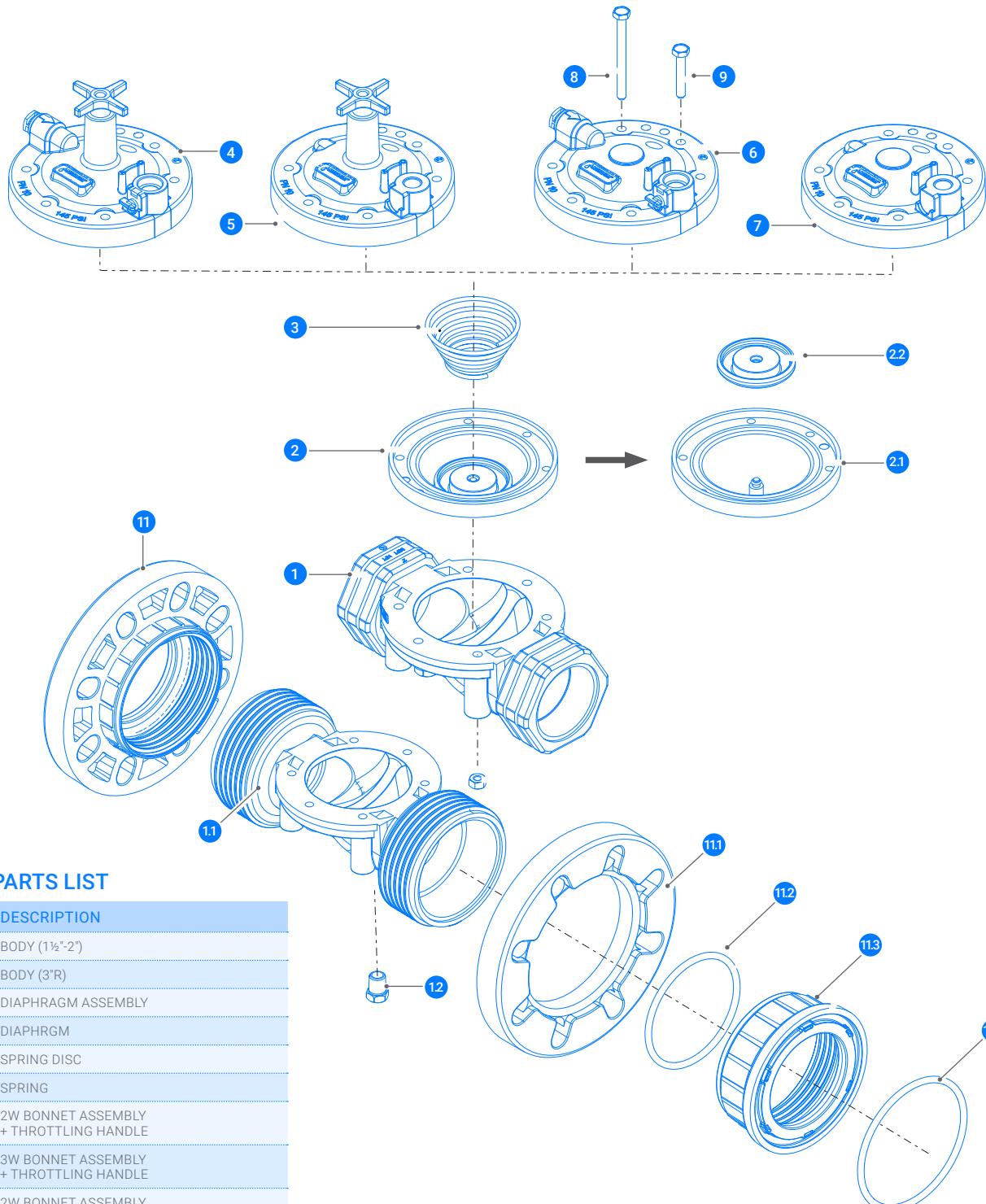
## 100 Series

DIAM.	CONNECTION TYPE	FUNCTIONS					
		PRESSURE REDUCING	ELECTRIC AC & PRESSURE REDUCING	ELECTRIC DC & PRESSURE REDUCING	PRESSURE SUSTAINING	PRESSURE REDUCING & SUSTAINING	QUICK RELIEF
3"	ISO FLANGE	71600-052310	71640-005009	71640-005025	71600-050265	71600-050270	71600-050354
	BSTD FLANGE	71600-009125	71640-005020	71640-016990	71600-011300	71600-009453	71600-014145
4"	ISO FLANGE	71600-050369	71640-005455	71640-006220	71600-050310	71600-050300	71600-014256
	BSTD FLANGE	71600-009590	71640-005210	71640-005225	71600-011540	71600-050302	71600-050301
6"	ISO FLANGE	71600-051511	71640-016671	71640-016672	71600-004421	71600-051510	71600-050372
	BSTD FLANGE	71600-004420	71640-005868	71640-016662	71600-051521	71600-011755	71600-004301



# 75 SERIES PLASTIC VALVES

## 1½" - 3"R / 40MM - 80MM



### → PARTS LIST

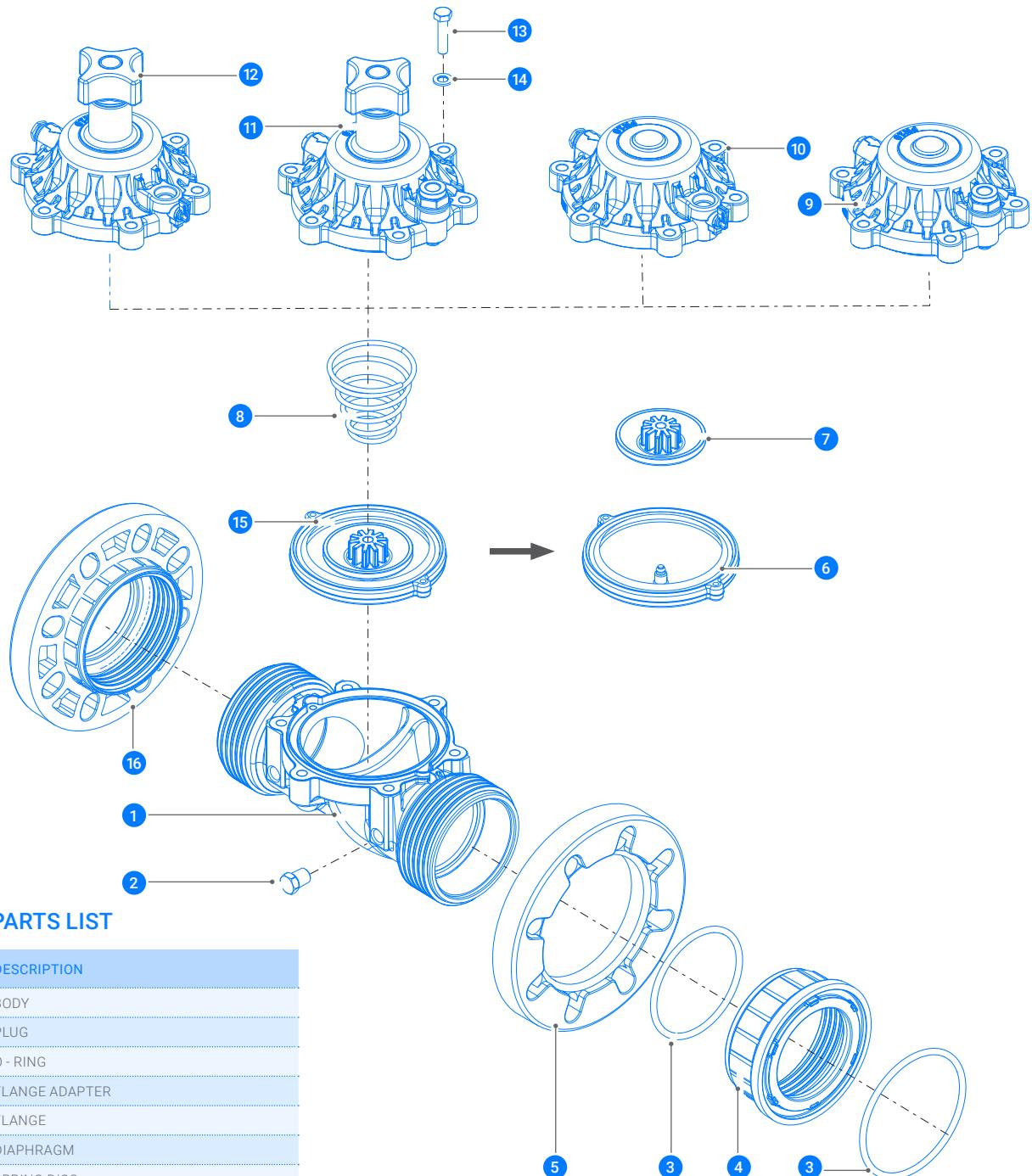
#	DESCRIPTION
1	BODY (1½"-2")
1.1	BODY (3"R)
2	DIAPHRAGM ASSEMBLY
2.1	DIAPHRGM
2.2	SPRING DISC
3	SPRING
4	2W BONNET ASSEMBLY + THROTTLING HANDLE
5	3W BONNET ASSEMBLY + THROTTLING HANDLE
6	2W BONNET ASSEMBLY
7	3W BONNET ASSEMBLY
8	BOLT
9	SHORT BOLT
10	NUT
11	FLANGE ASSEMBLY
11.1	FLANGE
11.2	O - RING
11.3	FLANGE ADAPTER
12	PLUG

### → CATALOG NUMBERS

PART LIST #	DESCRIPTION	CATALOG NUMBER
2 (2.1, 2.2)	2W, DIAPHRAGM KIT	71680-007250
3	3W, DIAPHRAGM KIT	71680-006170
11 (11.1 - 11.3)	SPRING NO. 22	71680-008400
12	SET OF UNIVERSAL FLANGE 3" (1 SIDES)	71680-000610

# 75 SERIES PLASTIC VALVES

## 3" - 4"R / 80MM - 100MM



### → PARTS LIST

#	DESCRIPTION
1	BODY
2	PLUG
3	O - RING
4	FLANGE ADAPTER
5	FLANGE
6	DIAPHRAGM
7	SPRING DISC
8	SPRING
9	3W BONNET ASSEMBLY
10	2W BONNET ASSEMBLY
11	3W BONNET ASSEMBLY + THROTTLING HANDLE
12	2W BONNET ASSEMBLY + THROTTLING HANDLE
13	BOLT
14	WASHER
15	DIAPHRAGM ASSEMBLY
16	FLANGE ASSEMBLY

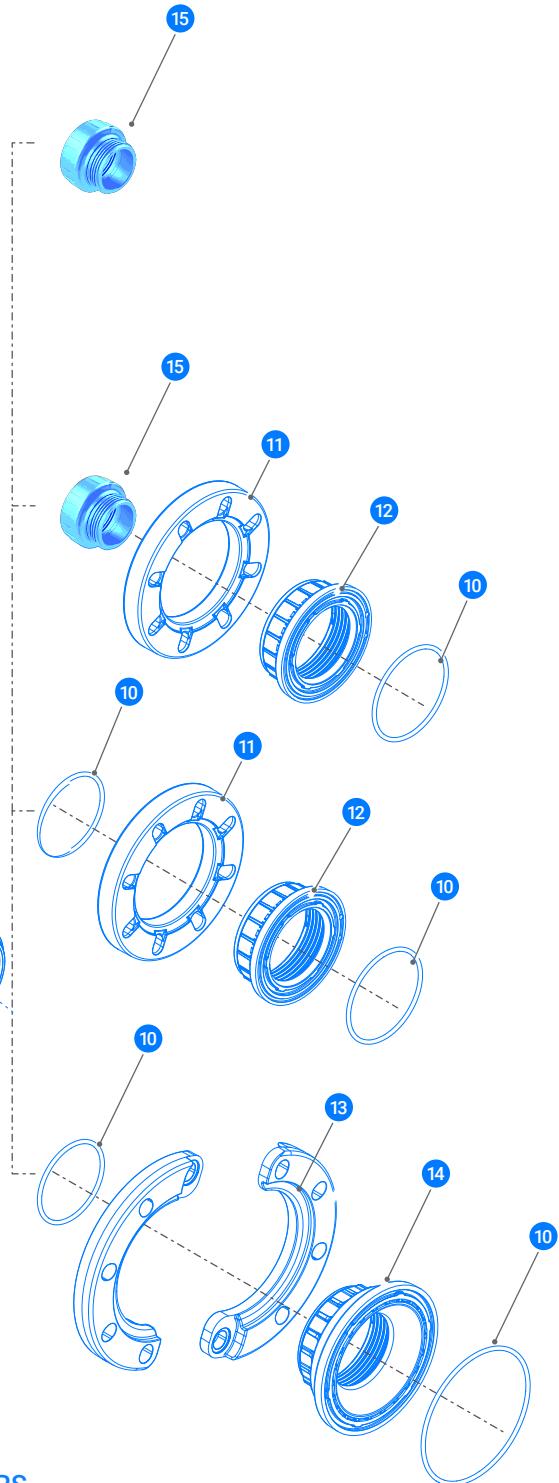
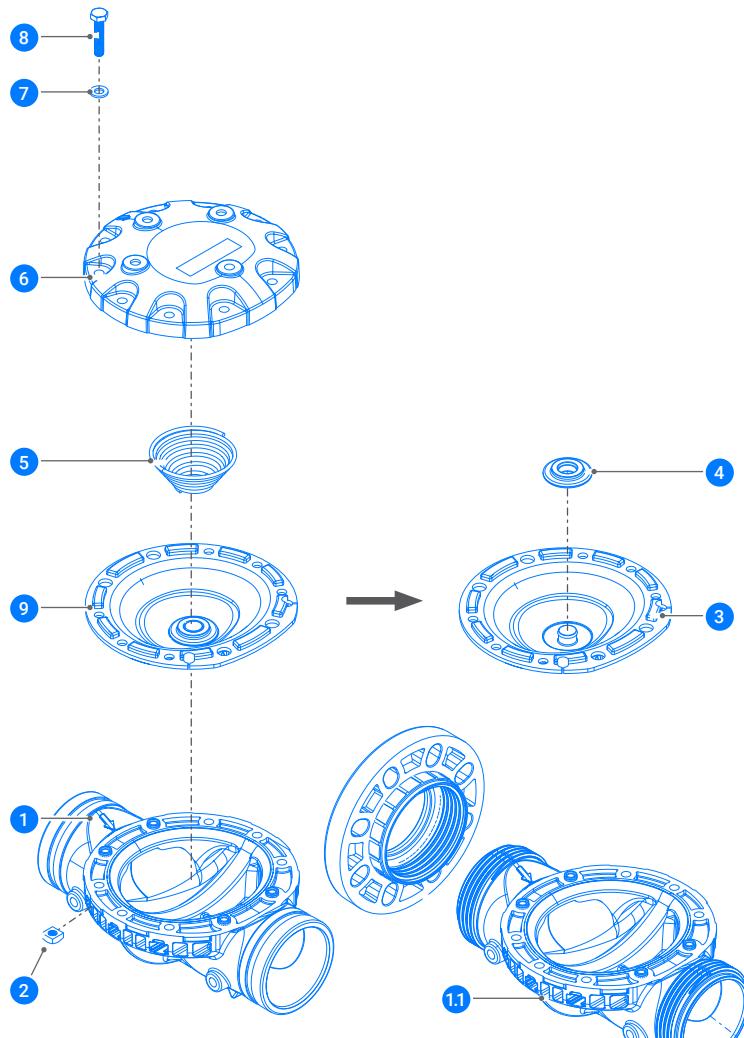
Threaded body assembly parts: 1, 2  
Two-sided flanged body assy parts: 1, 2, 17 (2 qty)

### → CATALOG NUMBERS

PART LIST #	DESCRIPTION	CATALOG NUMBER
15 (6 & 7)	2W, DIAPHRAGM KIT	71680-006370
	3W, DIAPHRAGM KIT	71680-006380
8	SPRING NO. 6	71680-011022
16 (3 & 4 & 5)	SET OF UNIVERSAL FLANGE 3" (1 SIDES)	71680-000610
	SET OF UNIVERSAL FLANGE 4" (1 SIDES)	71680-000620

# 75 SERIES PLASTIC VALVES

## 3H" - 6"R / 100MM - 150MM



### → PARTS LIST

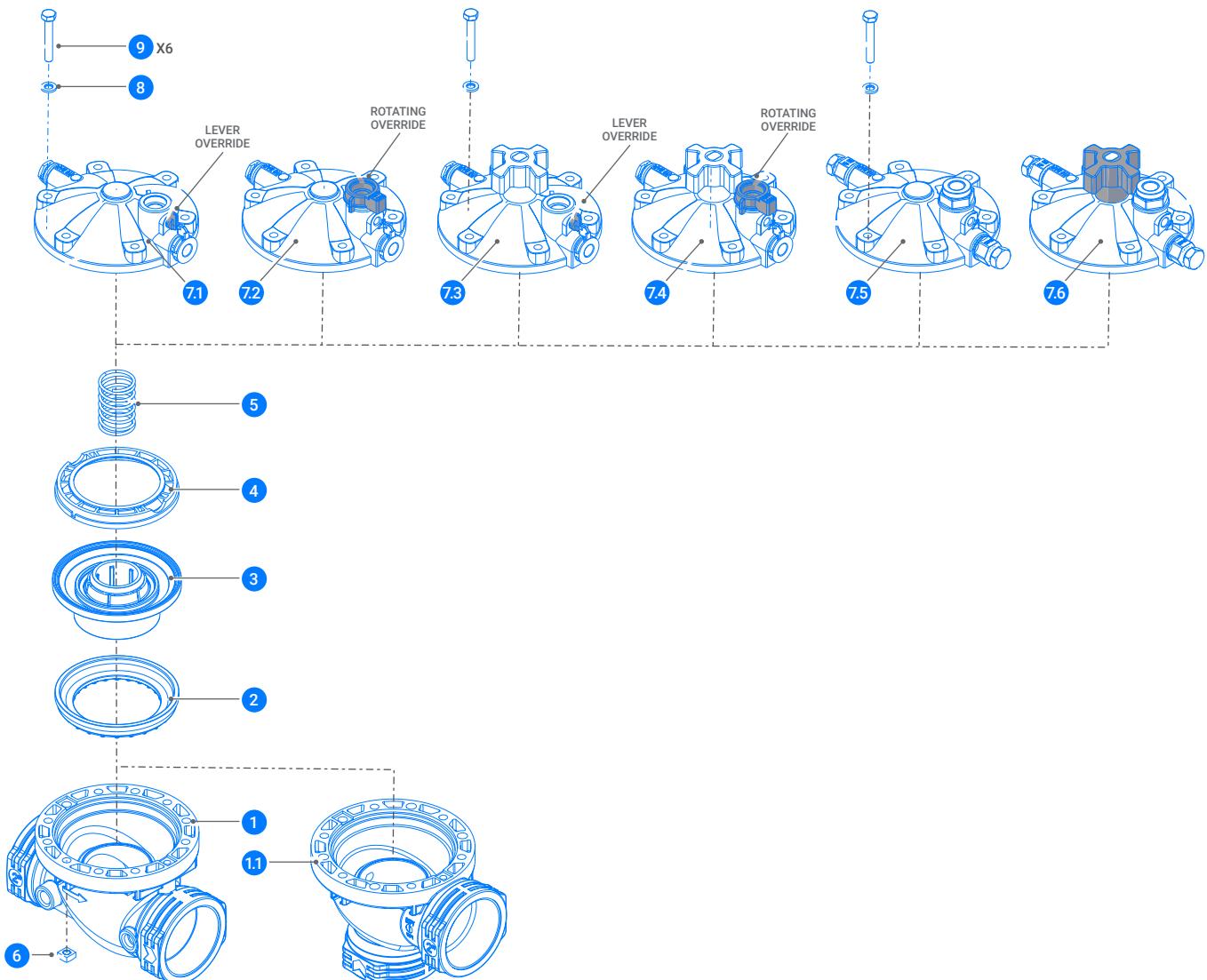
#	DESCRIPTION
1	GROOVED BODY
1.1	BODY
2	NUT
3	DIAPHRAGM
4	SPRING DISC
5	SPRING
6	BONNET
7	WASHER
8	BOLT
9	DIAPHRAGM KIT
10	O-RING
11	FLANGE
12	FLANGE ADAPTER
13	6" FLANGE (2 PCS)
14	FLANGE ADAPTER 6"
15	3" THR ADAPTER

### → CATALOG NUMBERS

PART LIST #	DESCRIPTION	CATALOG NUMBER
3 & 4	3W, DIAPHRAGM	71680-000229
5	SPRING NO. 9	71680-008100
10 & 13 & 14	SET OF UNIVERSAL FLANGE 6" (2 SIDES)	71680-000145
10 & 11 & 12	SET OF UNIVERSAL FLANGE 4" (2 SIDES)	71680-051283
15	3'H THR. NPT (2 SIDES)	71680-051280
15	3'H THR. BSP (2 SIDES)	71680-051281
10 & 11 & 12 & 15	3'H FLANGE ASSY (2 SIDES)	71680-051282

# 80 SERIES PLASTIC VALVES

## 1½" - 2" / 40MM - 50MM



### → PARTS LIST

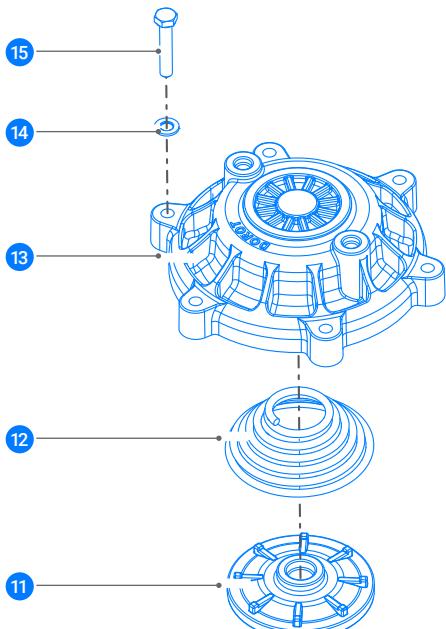
#	DESCRIPTION
1	BODY
1.1	ANGLE BODY
2	LOWER DIAPHRAGM SUPPORT
3	DIAPHRAGM ASSEMBLY
4	UPPER DIAPHRAGM SUPPORT
5	SPRING
6	NUT
7.1	BONNET ASSEMBLY + LEVER OVERRIDE
7.2	BONNET ASSEMBLY + ROTATING OVERRIDE
7.3	BONNET ASSEMBLY + THROTTLING HANDLE & LEVER OVERRIDE
7.4	BONNET ASSEMBLY + THROTTLING HANDLE & ROTATING OVERRIDE
7.5	3W BONNET ASSEMBLY
7.6	3W BONNET ASSEMBLY + THROTTLING HANDLE
8	WASHER
9	BOLT

### → CATALOG NUMBERS

PART LIST #	DESCRIPTION	CATALOG NUMBER
3 (3 & 10 & 11)	DIAPHRAGM KIT	71680-006175
5	SPRING - NO. 116	71680-008150
	SPRING - NO. 117	71680-008155
12	STRAIGHT BODY FILTER KIT	71680-010430
12.1	ANGEL BODY FILTER KIT	71680-010420
2	LOWER DIAPHRAGM SUPPORT	71680-018270
4	UPPER DIAPHRAGM SUPPORT	71680-018260

# 80 SERIES PLASTIC VALVES

## 3" - 4"R / 80MM - 100MM

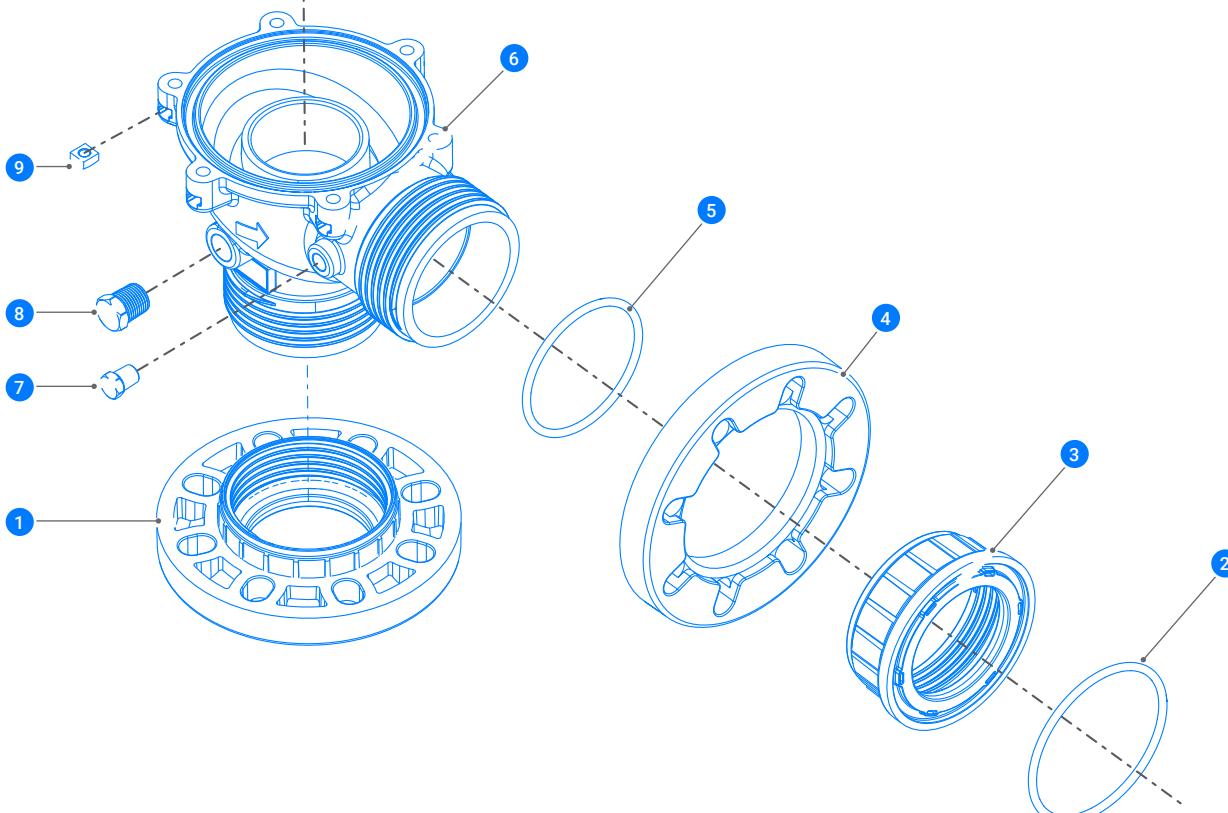


### → PARTS LIST

#	DESCRIPTION
1	FLANGE ASSY.
2	O - RING
3	THREADED ADAPTOR
4	FLANGE
5	O - RING
6	BODY
7	PLUG 1/4
8	PLUG 1/2
9	NUT
10	DIAPHRAGM
11	SPRING SEA
12	SPRING
13	BONNET
14	WASHER
15	BOLT

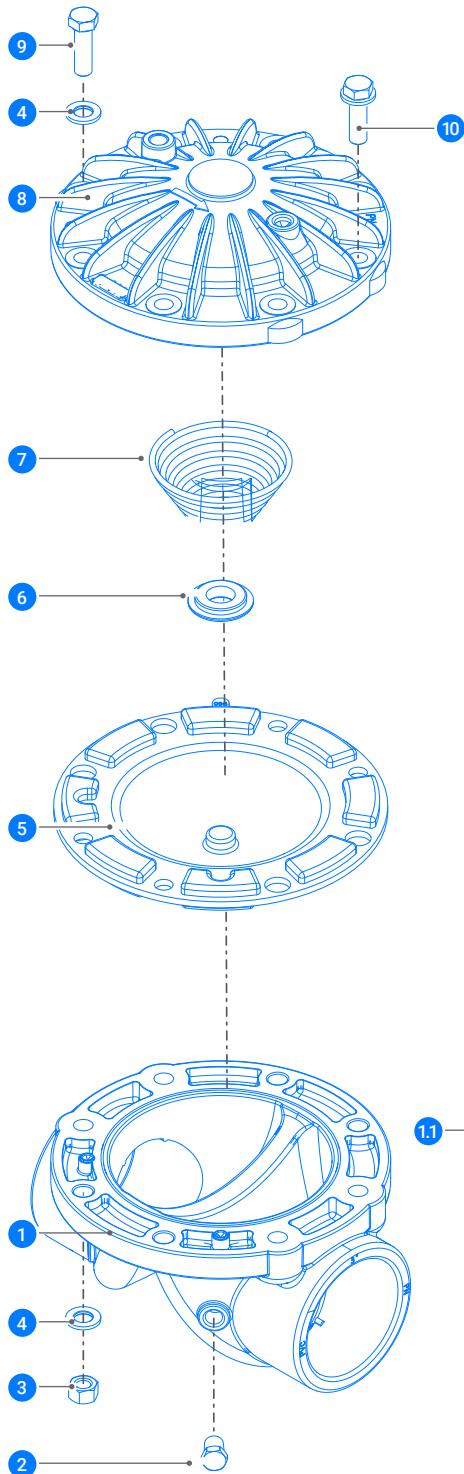
### → CATALOG NUMBERS

PART LIST #	DESCRIPTION	CATALOG NUMBER
10	DIAPHRAGM - NO. 345 NR	71680-007710
11	SPRING SEAT SELA	71680-009105
12	SPRING NO. 9	71680-008100
1 (2 & 3 & 4 & 5)	SET OF UNIVERSAL FLANGE 3" (1 SIDES)	71680-000610
	SET OF UNIVERSAL FLANGE 4" (1 SIDES)	71680-000620



# 90 SERIES PVC VALVES

## 3" - 6" / 80MM - 150MM



### → PARTS LIST

#	DESCRIPTION
1	SOLVENT WELDED BODY
1.1	THREADED BODY
1.2	160MM/6" BODY
3	NUT
4	WASHER
5	DIAPHRAGM
6	SPRING DISC
7	SPRING
8	BONNET
9	BOLT
10	SHORT BOLT

### → CATALOG NUMBERS

#	DESCRIPTION	CATALOG NUMBER
5	DIAPHRAGM NO. 095	71680-007660
	DIAPHRAGM NO. 052	71680-007670
6	SPRING SEAT, PVC VALVE 3" - 4"	71680-008905
	SPRING SEAT, PVC VALVE 6"	71680-008990
7	SPRING NO. 9	71680-008100
	SPRING NO. 6	71680-008190

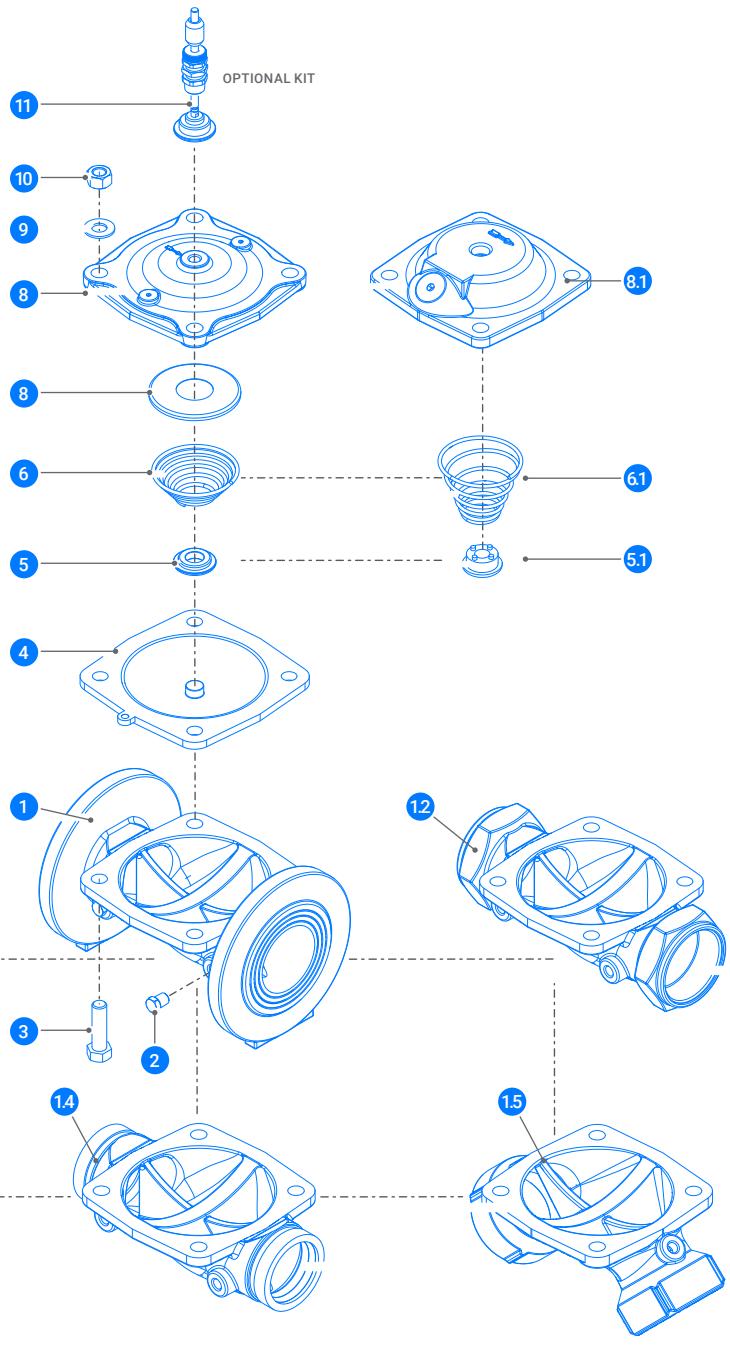
# 100 SERIES METAL VALVES

## 1.5" - 4" / 40MM - 100MM

### → PARTS LIST

#	DESCRIPTION
1	BODY
1.1	ANGLE GROOVED BODY
1.2	THREADED BODY
1.3	ANGLE BODY
1.4	GROOVED BODY
1.5	ANGLE THREADED BODY
2	PLUG
3	BOLT
4	DIAPHRAGM
5	BOTTOM SPRING DISC
5.1	BOTTOM SPRING DISC
6	SPRING
6.1	SPRING
7	UPPER SPRING DISC
8	BONNET 1.5"-3"
8.1	BONNET 3"-4"
9	WASHER
10	NUT
11	INDICATOR KIT*

\* Optional kit - refer to detailed data-sheet



### → CATALOG NUMBERS

PART LIST #	DESCRIPTION	CATALOG NUMBER
4	DIAPHRAGM - NO. 013	71680-007100
	DIAPHRAGM - NO. 003, S100, 2"	71680-007300
	L.P DIAPHRAGM - NO. 002, S100, 2"	71680-007400
	DIAPHRAGM - NO. 032, S100, 3"	71680-006300
	L.P DIAPHRAGM - NO. 005, S100 3"	71680-006400
5	SPRING SEAT, S100 1½" - 2"	71680-008905
	SPRING SEAT, S100 3"	71680-008900
6	SPRING - NO. 52, S100 1½" - 2"	71680-008000
	SPRING - NO. 9, S100 3"	71680-008100

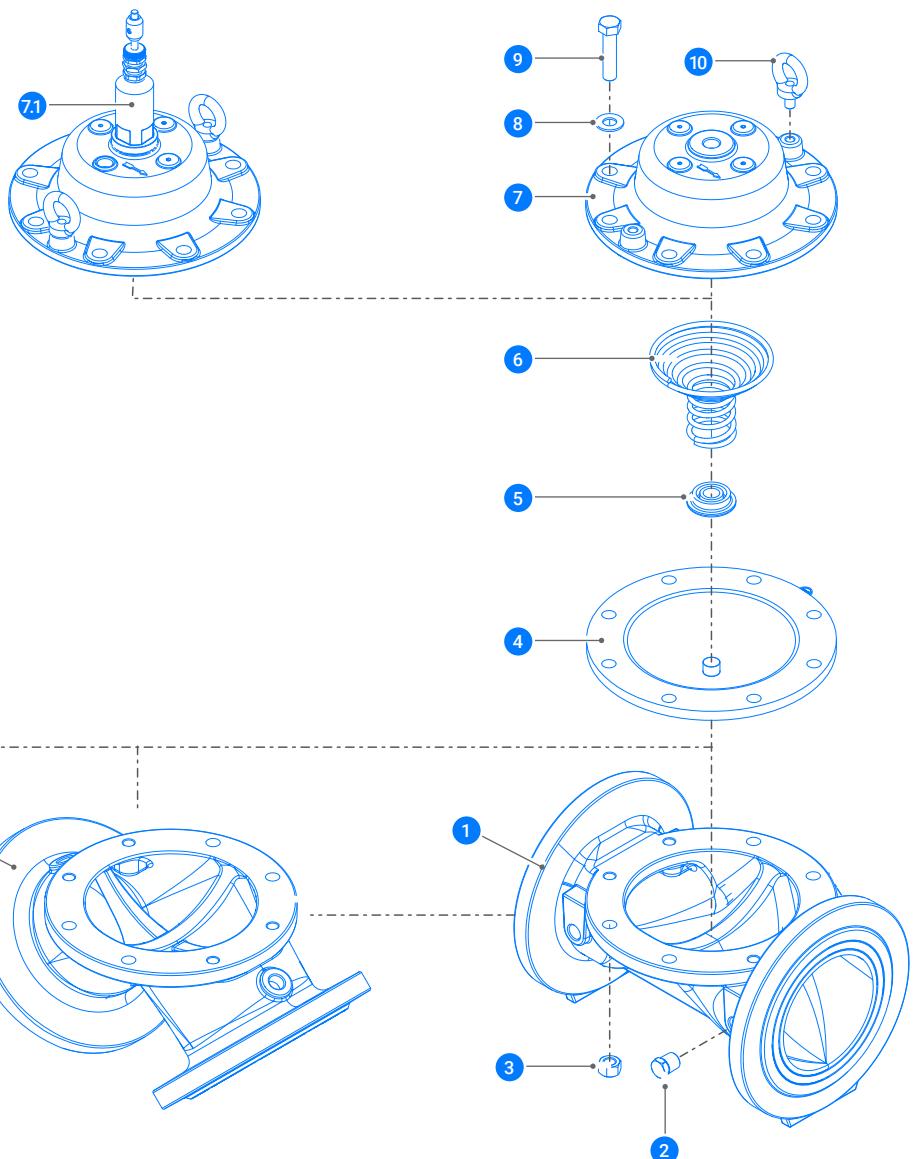
# 100 SERIES METAL VALVES

## 6"- 10" / 150MM - 250MM

### → PARTS LIST

#	DESCRIPTION
1	BODY
1.1	ANGLE BODY
1.2	GROOVED BODY
2	PLUG
3	NUT
4	DIAPHRAGM
5	SPRING DISC
6	SPRING
7	BONNET
7.1	INDICATOR KIT*
8	WASHER
9	BOLT
10	LIFTING RING

\* Optional kit - refer to detailed data-sheet



### → CATALOG NUMBERS

PART LIST #	DESCRIPTION	CATALOG NUMBER
4	DIAPHRAGM - NO. 062, S100 6" - 686	71680-006520
	L.P. DIAPHRAGM - NO. 009, S100 6" - 686*	71680-006600
	DIAPHRAGM - NO. 036, S100 8"	71680-006850
	L.P. DIAPHRAGM - NO. 037, S100 8"	71680-006860
	DIAPHRAGM - NO. 040, S100 10"	71680-006800
5	SPRING SEAT, S100 6"	71680-009000
	SPRING SEAT, S100 8" - 10"	71680-008995
6	SPRING - NO. 57, S100 6"	71680-008200
	SPRING - NO. 61, S100 8" - 10"	71680-008300

# AquaNet™ AC/DC ELECTRIC VALVE

The professional electric/hydraulic valve line.



1½" - 2"  
MODEL



¾" - 1"  
MODEL



Low Energy  
Consumption



Quick  
Reaction



Simple to  
Use

## Benefits & Features

- ✓ Patented hydraulic 3-way control
- ✓ Designed to operate with all types of water, including effluentwater (2 mm command orifice)
- ✓ Pressure & flowrange
- ✓ Manual override: CLOSE-AUTO-OPEN
- ✓ Built-in pressure regulator with adjustable knob 0.7 – 4.5 bar (optional 1½" & 2" Electrical models only)
- ✓ Low energy consumption for maximal wire distance
- ✓ Flow control handle – standard on all models
- ✓ EPDM diaphragm resistant against chemicals used in agriculture

## → PACKAGING DATA

MODEL	QUANTITY P/BOX UNITS	BOX DIMENSIONS CM X CM X CM	BOX WEIGHT KG (AVERAGE)
AQUANET PLUS ¾", 1"	12	47.0 X 26.0 X 12.0	4.45
AQUANET PLUS 1½" G			1.18
AQUANET PLUS 1½" A		21.5 X 12.5 X 19	1.29
AQUANET PLUS 2" G	1		1.16
AQUANET PLUS 2" A			1.24
PRESSURE REGULATOR KIT		12.0 X 9.0 X 7.0	0.11

## → SPECIFICATIONS

MODEL	¾" & 1" GLOBE MODELS	1½" & 2" GLOBE & ANGLE
FLOW	0.025 – 7.0 M <sup>3</sup> /H	0.1 – 34.0 M <sup>3</sup> /H
WORKING PRESSURE	0.2 -10 BAR	0.3 -10 BAR
AMBIENT TEMP. MAX	60°C (140°F)	60°C (140°F)
FLUID TEMP. MAX	60°C (140°F)	60°C (140°F)
PLASTIC PARTS	REINFORCED NYLON	REINFORCED NYLON
DIAPHRAGMS	EPDM	EPDM
LEADS	2 X AWG 22 (80 CM)	2 X AWG 22 (120 CM)

\* Pressure Regulating Range: 0.7-4.5 bar (1½" & 2" electric models only)

## → ELECTRICAL SPECIFICATIONS

### 24V AC

VOLTAGE	18-28 VAC
INRUSH	90 mA
HOLDING	75 mA

IN AC MODELS, 2-5 SECONDS DELAY FROM COMMAND TO ACTIVATION

CABLE GAUGE (AWG)	DIAMETER (MM)	CROSS SECTION (MM <sup>2</sup> )	MAX. DISTANCE (M)
20	0.8	0.5	1250
18	1.0	0.8	2000
17	1.1	1.0	2500
16	1.3	1.3	3500
15	1.4	1.5	5000

MAX. DISTANCE BETWEEN AQUANET PLUS AC AND CONTROLLERS

## → ELECTRICAL CONNECTIONS

¾" & 1" DC RED + BLACK COMMON
¾" & 1" AC BLACK/BLACK
1 ½" & 2" DC RED + BLACK COMMON
1 ½" & 2" AC BLACK/BLACK
(CHANGING DC WIRE CONNECTIONS WILL CHANGE NC TO NO)
IT IS RECOMMENDED TO ISOLATE WIRES CONNECTIONS FROM WATER TO PREVENT CORROSION.
AQUANETPLUS DC IS COMPATIBLE WITH MOST DC LATCH CONTROLLERS WITH TWO OR THREE WIRE OUTPUT. FOR SPECIFIC MODELS PLEASE CONTACT YOUR NETAFIM REPRESENTATIVE.

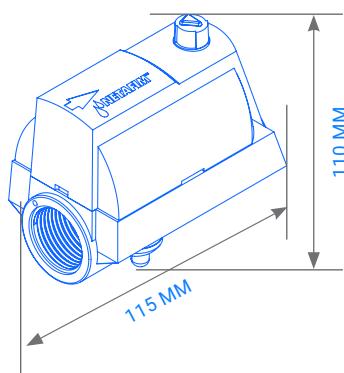
### DC

VOLTAGE	12-40 VDC	
MIN. PULSE WIDTH:	80 ms	
RECOMMENDED WORKING CONDITION CAPACITOR MODE		
VOLTAGE (VDC)	CAPACITOR (MF)	MIN. PULSE (MS)
12-18	4700	80
18-28	3300	80
28-40	2200	80

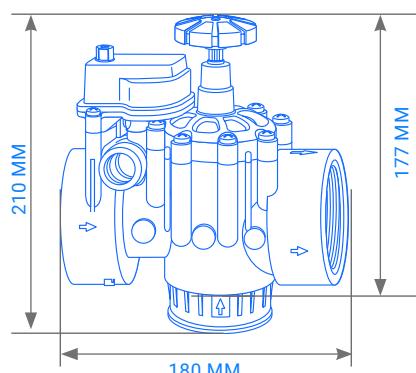
CABLE GAUGE (AWG)	DIAMETER (MM)	CROSS SECTION (MM <sup>2</sup> )	MAX. DISTANCE (M)
20	0.8	0.5	150
17	1.1	1.0	240
15	1.4	1.5	380

## → TECHNICAL DIMENSIONS

### ¾" & 1" MODELS

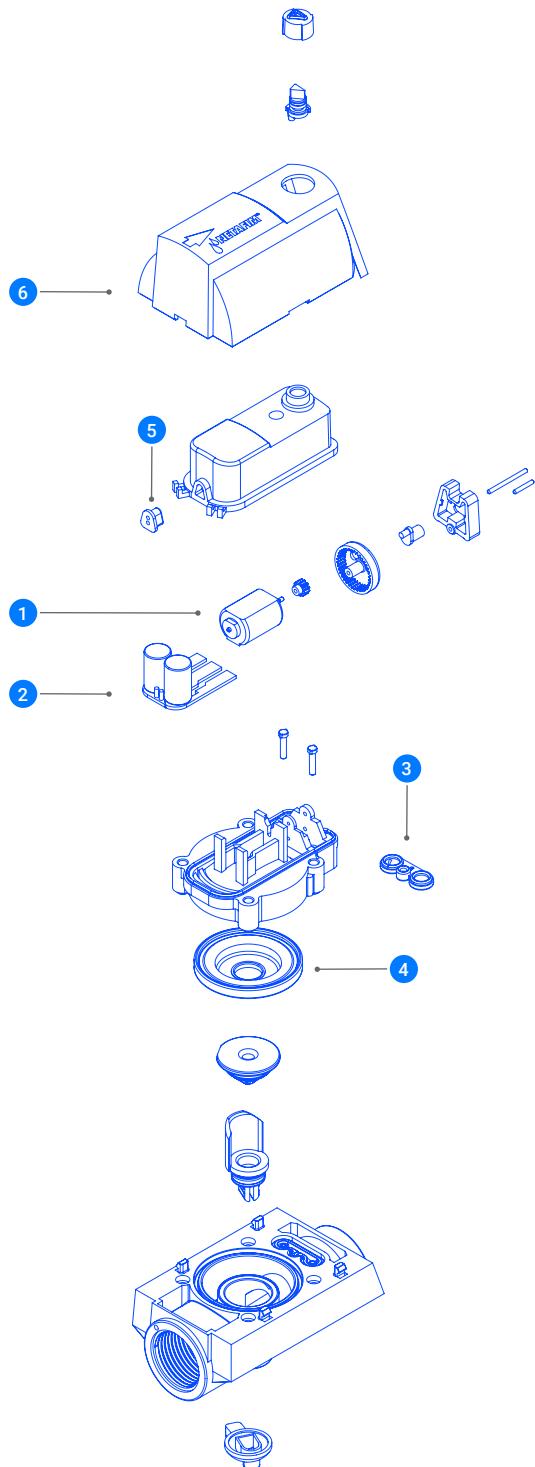


### 1½" & 2" MODELS



# AquaNet™

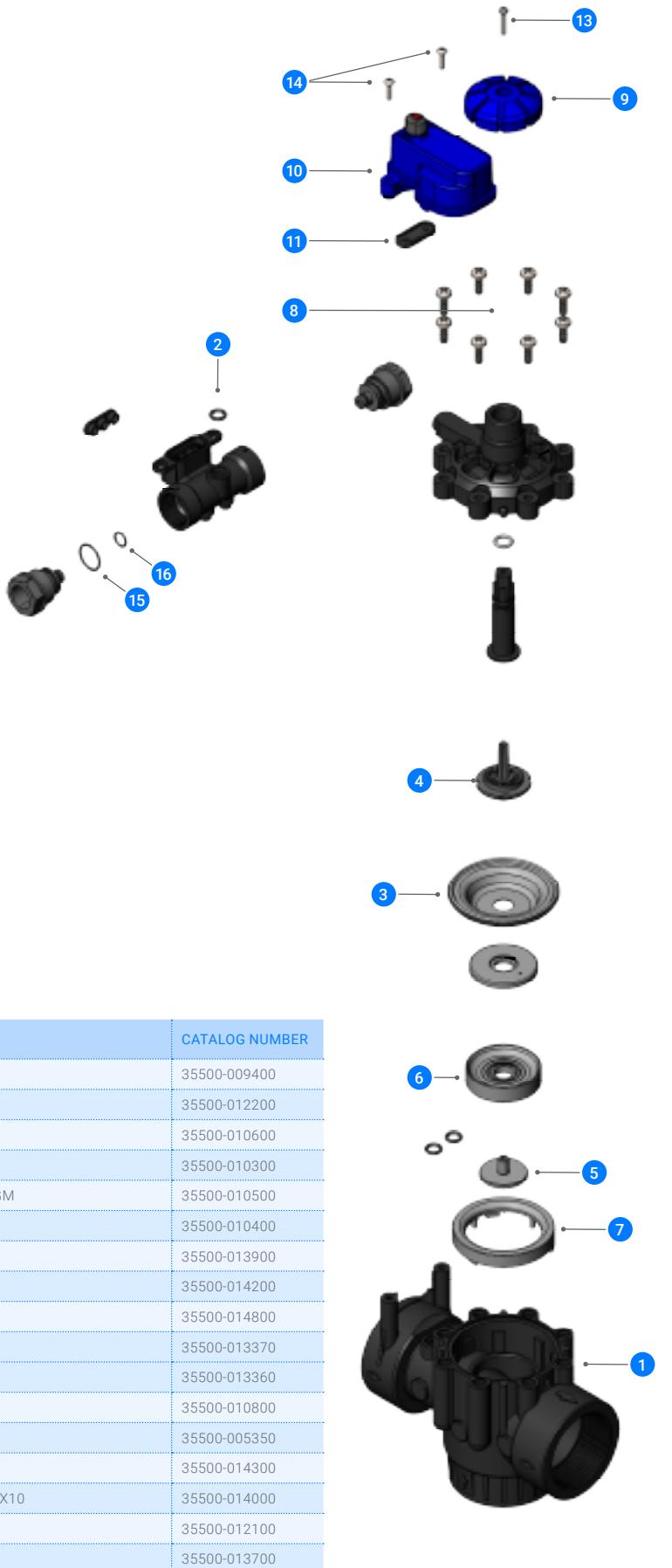
**¾" - 1"**



## → PARTS LIST & CATALOG NUMBERS

PART LIST #	DESCRIPTION	CATALOG NUMBER
1	ELECTRIC ENGINE DC FOR ELECTRIC VALVE	35500-005800
	ELECTRIC ENGINE AC FOR ELECTRIC VALVE	35500-005900
2	AQUANET ELECTRIC CIRCLE	35500-008550
3	AQUANET ELECTRIC VALVE DIAPHRAGM NT2	35500-004100
4	AQUANET MAIN DIAPHRAGM 1"-¾"	35500-004200
5	SEAL FOR AQUANET WIRES	35500-003500
6	TOP BLUE COVER FOR ELEC. VALVE	35500-004000

# AquaNet™ PLUS 1½"- 2" ANGLE



## → PARTS LIST & CATALOG NUMBERS

PART LIST #	DESCRIPTION	CATALOG NUMBER
1	PN BSP 2 10	35500-009400
2	AQUANET COMMAND O-RING	35500-012200
3	AQUANET 1½"-2" DIAPHRAGM	35500-010600
4	AQUANET DIAPHRAGM HOLDER	35500-010300
5	AQUANET FASTENING BOLT FOR MAIN DIAPHRAGM	35500-010500
6	AQUANET DIAPHRAGM CORE	35500-010400
7	AQUANET 1½"-2" RETAINER	35500-013900
8	AQUANET STAINLESS STEEL BOLTS 1½X14-	35500-014200
9	KOMBI-HANDLE FOR BLUE CHOKE	35500-014800
10	AQUANET 1½-2 OPERATING MECHANISM DC	35500-013370
	AQUANET 1½-2 OPERATING MECHANISM AC	35500-013360
11	AQUANET 1½"-2" COMMAND DIAPHRAGM	35500-010800
12	TEFEN HEX PIPE PLUG 1/8 BLACK	35500-005350
13	KOMBI BOLT ¾X8	35500-014300
14	AQUANET OPERATING MECHANISM SS BOLTS 1½X10	35500-014000
15	AQUANET PLUG O-RING/SMALL	35500-012100
16	AQUANET PLUG O-RING/BIG 9.1X1.6	35500-013700

# PLASTIC PILOTS

## → CATALOG NUMBERS

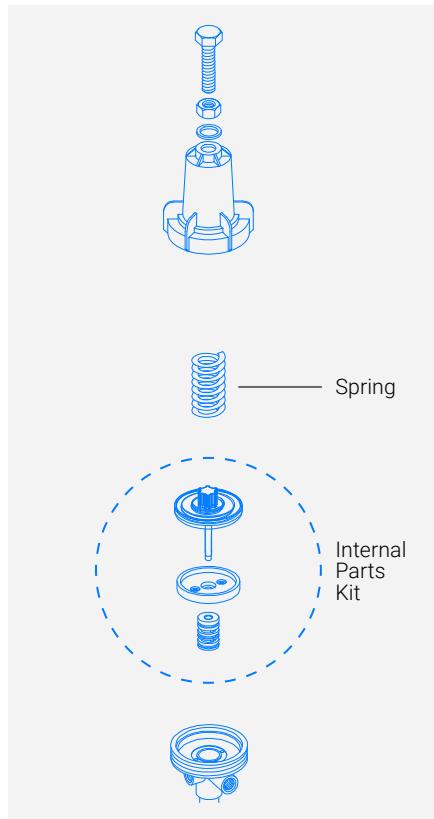
### 29-100 / 3-way Pressure Reducing



SPRING COLOR	RANGE	CATALOG NUMBER			INTERNAL PARTS
		PILOT	SPRING		
#72	BAR 0.3-3.5	71680-001183	71680-010800		71680-001027
	PSI 4.5-50				
#54	BAR 0.5 - 5	71680-001182	71680-010850		71680-001027
	PSI 7 - 70				
#65	BAR 1 - 8	71680-001181	71680-010700		
	PSI 15-115				

- Catalog number for bracket only available upon request

## → SPARE PARTS



### 29-10R / 3-way Pressure Reducing



SPRING COLOR	RANGE	CATALOG NUMBER			INTERNAL PARTS
		PILOT	SPRING		
#72	BAR 0.5-4.5	71680-001184	71680-010800		AVAILABLE UPON REQUEST
	PSI 7 - 65				
#54	BAR 0.5-5.5	71680-000975	71680-010850		AVAILABLE UPON REQUEST
	PSI 7 - 70				
#65	BAR 1 - 8.5	71680-001179	71680-010700		
	PSI 15-125				

- Catalog number for bracket only available upon request

### 29-500 / 2-way Quick Relief



SPRING COLOR	RANGE	CATALOG NUMBER			INTERNAL PARTS
		PILOT	SPRING		
#72	BAR 1 - 8	AVAILABLE UPON REQUEST	71680-010800		AVAILABLE UPON REQUEST
	PSI 15 - 115				
#54	BAR 1 - 10	71680-001228	71680-010850		AVAILABLE UPON REQUEST
	PSI 15 - 150				

- Catalog number for bracket only available upon request

### 29-200 / 3-way Mutli Purpose (Pressure Sustaining / Reducing)



SPRING COLOR	RANGE	CATALOG NUMBER			INTERNAL PARTS
		PILOT	SPRING		
#72	BAR 0.3 - 3.5	71680-001115*	71680-010800		71680-001030
	PSI 4.5 - 50				
#54	BAR 0.5 - 5	71680-001100*	71680-010850		71680-001030
	PSI 7 - 70				
#65	BAR 1 - 8	71680-001066*	71680-010700		
	PSI 15 - 115				

- Catalog number for bracket only available upon request

\* With 8mm Connection + Bracket

## → CATALOG NUMBERS

### 29-50M / 3-way Mutli Purpose (Pressure Sustaining / Reducing)



SPRING COLOR	RANGE	CATALOG NUMBER		
		PILOT	SPRING	INTERNAL PARTS
#72	BAR	0.3 - 3	71680-051268	71680-001030
	PSI	4 - 40	71680-010800	
#54	BAR	0.5 - 4.5	71680-051269	
	PSI	7 - 65	71680-010850	
#65	BAR	1 - 7.5	71680-051270	
	PSI	15 - 110	71680-010700	

- Catalog number for bracket only available upon request

### 29-310 / 3-way Flow Control (Differential PR)



SPRING COLOR	RANGE	CATALOG NUMBERS		
		PILOT	INTERNAL PARTS	
#82	BAR	0.2 - 0.5	71680-001175	AVAILABLE UPON REQUEST
	PSI	3-7		

- Catalog number for bracket only available upon request

### 29-50F / 3-way Flow Control (Differential PR)



SPRING COLOR	RANGE	CATALOG NUMBERS		
		PILOT	INTERNAL PARTS	
#82	BAR	0.2 - 0.5	AVAILABLE UPON REQUEST	AVAILABLE UPON REQUEST
	PSI	3-7		

- Catalog number for bracket only available upon request

# METAL PILOTS

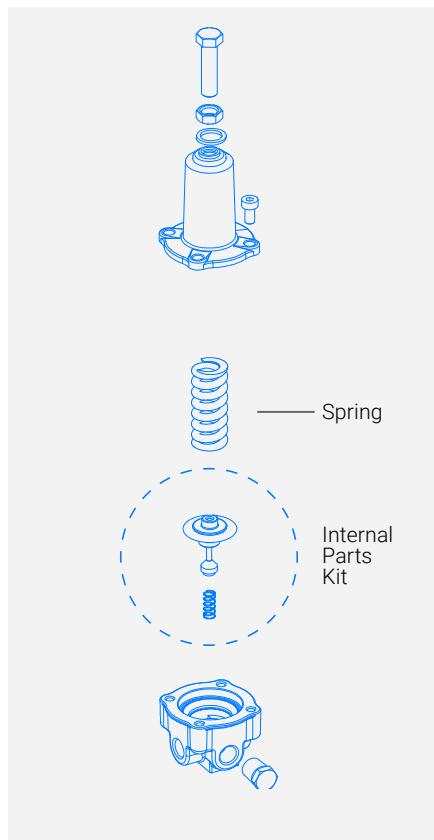
## → CATALOG NUMBERS

### 31-10R / 3-way Pressure Reducing



SPRING COLOR	RANGE		CATALOG NUMBER		
			PILOT	SPRING	INTERNAL PARTS
#130	BAR	0.5 - 6	AVAILABLE UPON REQUEST	71680-010860	AVAILABLE UPON REQUEST
	PSI	7 - 85			
#124	BAR	1.5 - 12	71680-001198	71680-008510	AVAILABLE UPON REQUEST
	PSI	22 - 175			

## → SPARE PARTS



### 31-10S / 3-way Pressure Sustaining



SPRING COLOR	RANGE		CATALOG NUMBER		
			PILOT	SPRING	INTERNAL PARTS
#130	BAR	0.5 - 6	71680-001189	71680-010860	AVAILABLE UPON REQUEST
	PSI	7 - 85			
#124	BAR	1.5 - 12	71680-001197	71680-008510	AVAILABLE UPON REQUEST
	PSI	20 - 175			

### 31-10F / 3-way Flow Control (Differential PR)



SPRING COLOR	RANGE		CATALOG NUMBER		
			PILOT	SPRING	INTERNAL PARTS
#78	BAR	0.2 - 0.7	71680-041120	71680-010810	AVAILABLE UPON REQUEST
	PSI	3 - 10			

### 31-310 / 3-way Multi Purpose (Pressure Sustaining / Reducing)\*



SPRING COLOR	RANGE		CATALOG NUMBER		
			PILOT	SPRING	INTERNAL PARTS
#42	BAR	0.3 - 6	71680-001220	71680-010600	71680-001225
	PSI	4 - 90			
#47	BAR	0.5 - 10	71680-001205	71680-010550	71680-001225
	PSI	7 - 150			
#50	BAR	0.6 - 15	71680-001210	71680-010500	
	PSI	9 - 220			

\* For 8" valves or up

## → CATALOG NUMBERS

### 68-410 / 2-way Pressure Reducing



SPRING COLOR	RANGE	CATALOG NUMBER		
		PILOT	SPRING	INTERNAL PARTS
#78	BAR	0.5 - 3	AVAILABLE UPON REQUEST	71680-001571
	PSI	7 - 45	71680-010810	
#66	BAR	1 - 11	71680-041130	71680-010720
	PSI	15 - 160	71680-010720	
#67	BAR	2 - 25	AVAILABLE UPON REQUEST	71680-011020
	PSI	30 - 360	71680-011020	

### 68-510 / 2-way Pressure Sustaining / Quick Relief



SPRING COLOR	RANGE	CATALOG NUMBER		
		PILOT	SPRING	INTERNAL PARTS
#66	BAR	0.8 - 13	71680-001430	71680-010720
	PSI	10 - 190		
#67	BAR	2 - 40	71680-041140	71680-051260
	PSI	30 - 580		

### CXPR / 2-way Pressure Reducing\*



SPRING COLOR	RANGE	CATALOG NUMBER		
		PILOT	SPRING	INTERNAL PARTS
#53	BAR	3 - 19	71680-001263	71680-008440
	PSI	44 - 275		

\* For 8" valves or up

### CXPS / 2-way Pressure Sustaining\*



SPRING COLOR	RANGE	CATALOG NUMBER		
		PILOT	SPRING	INTERNAL PARTS
#53	BAR	3 - 19	71680-001265	71680-008440
	PSI	44 - 275		

\* For 8" valves or up

### 68-215 / 2-way Quick Relief



SPRING COLOR	RANGE	CATALOG NUMBER		
		PILOT	SPRING	INTERNAL PARTS
#66	BAR	0.8 - 13	AVAILABLE UPON REQUEST	71680-010720
	PSI	10 - 190		
#67	BAR	2 - 16	AVAILABLE UPON REQUEST	71680-011020
	PSI	30 - 230		

# RELAYS & FLOATS

→ CATALOG NUMBERS

## Floats

70-300 / 2-way Modulating Plastic Float



71680-001527

70-400 / 2-way Modulating Metal Float



71680-013300

70-550 / 3-way Differential Vertical Metal Float



71680-001517

## Plastic Relays

25-300 / 3-way Hydraulic Relay



71680-000800

Galit / 3-way Hydraulic Relay



73220-001900

## Metal Relays

28-200  
2-Way Hydraulic Relay



71680-000960

66-21X  
3-way Hydraulic Relay

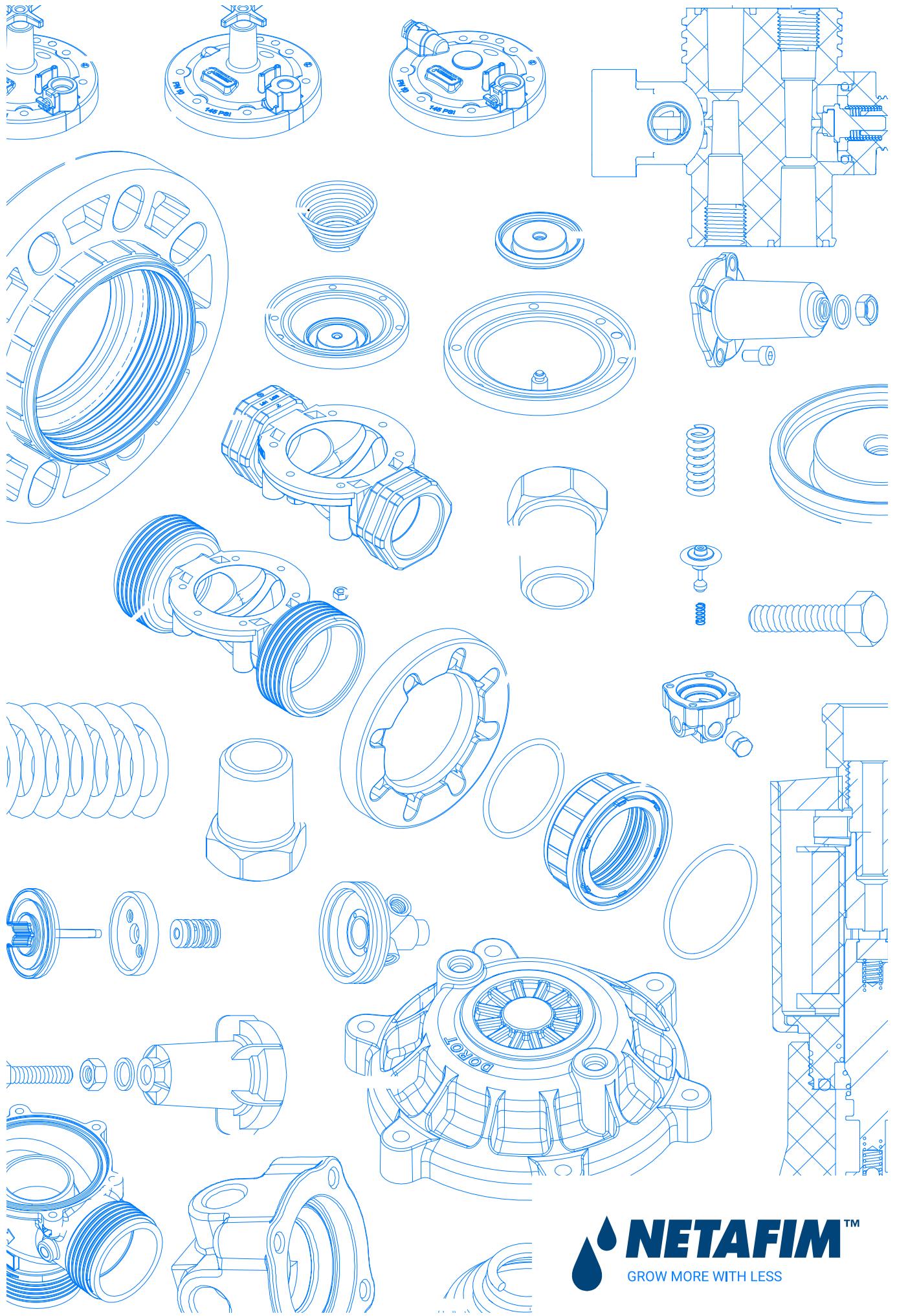


71680-001370

76-200  
3-Way Hydraulic Relay



71680-041150



 **NETAFIM™**  
GROW MORE WITH LESS

# Aquative™ PLUS ACTUATOR VALVE

Suitable for operation in all applications -  
agriculture, landscape and industry  
(water supply system)



## Benefits & Features

→ Smooth  
operationg in  
tough water  
conditions due  
to large horifice

Manual override CLOSE-AUTO-OPEN

Very low energy consumption for maximal wire distance

Optional NC (Normally Closed) or NO (Normally Open) configuration

## → SPECIFICATIONS

MODEL	AC	DC
VOLTAGE	24 VAC	12-40 VDC
PRESSURE RANGE (NO, NC)	0 - 10 BAR 0-140 PSI	
AMBIENT TEMP. MAX	60°C (140°F)	
FLUID TEMP. MAX	60°C (140°F)	
FILTRATION REQUIREMENTS	80 MESH	
INRUSH	90MA	-
HOLDING	75MA	-
PLASTIC PARTS RAW MATERIAL	REINFORCED NYLON	
COMMAND DIAPHRAGM RAW MATERIAL	EPDM	
HYDRAULIC PORTS	1/8" BSP	
LEADS	2 X AWG22 (1.2 M)	
DELAY FROM COMMAND TO ACTIVATION	2-5 SEC.	
PULSE WIDTH	-	50MS

## → RECOMMENDED WORKING CONDITIONS CAPACITOR MODE - FOR DC MODELS

VOLTAGE (VDC)	CAPACITOR (MF)	MIN. PULSE (MS)
12-18	4700	80
18-28	3300	80
28-40	2200	80

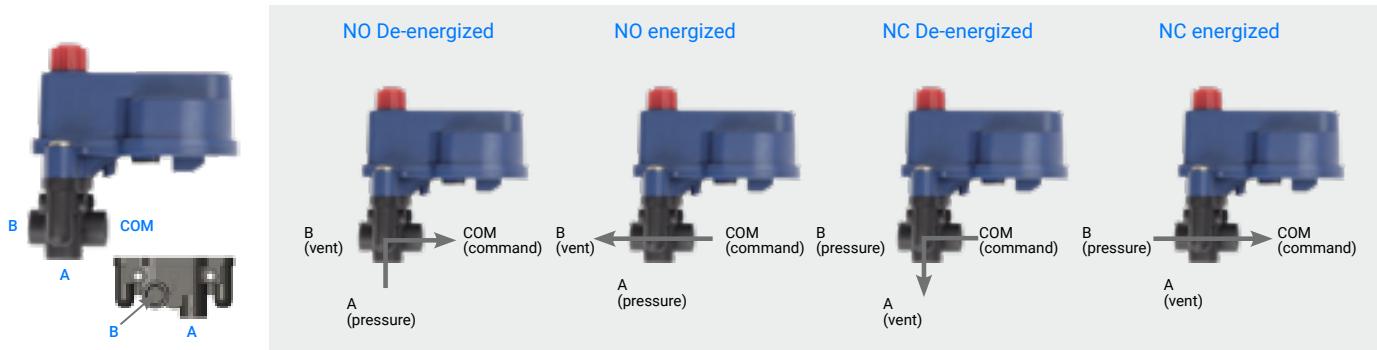
TWO WIRES: RED + / BLACK - COMMON  
CHANGING WIRE CONNECTIONS WILL CHANGE NC TO NO

## → HYDRAULIC CHARACTERISTICS / WATER PASSAGE

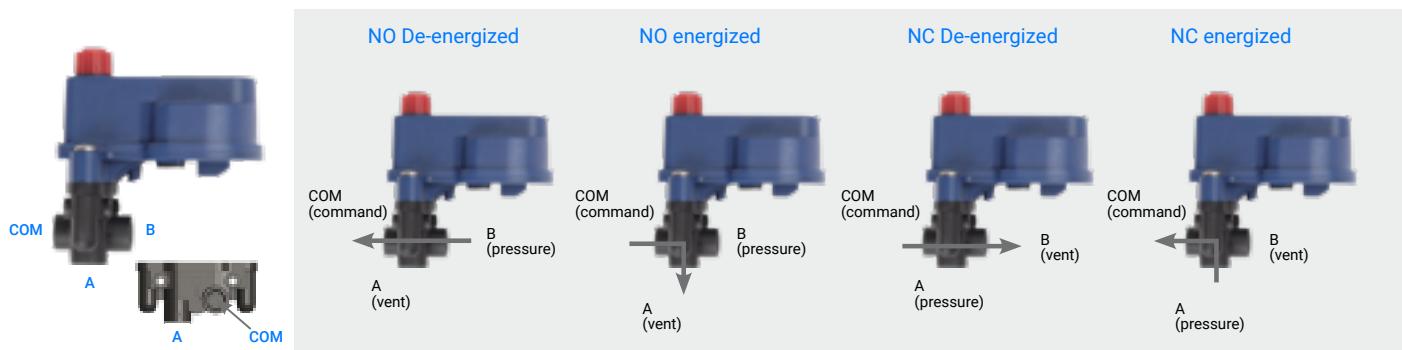
MODEL	ORIFICE
AQUATIVE PLUS™	2

## → CONFIGURATION

### CONFIGURATION 1 - STANDARD



### CONFIGURATION 2 - NON-STANDARD



## → PACKAGING DATA

MODEL	MODEL WEIGHT (GR)	UNITS PER CARTON	CARTON DIMENSIONS (CM X CM X CM)	CARTON WEIGHT (GR)
AQUATIVE PLUS (1 ACTUATOR)	147.5	50		7375
AQUATIVE PLUS (2 ACTUATOR)	457.5	14		6405
AQUATIVE PLUS (4 ACTUATOR)	783.5	8		6268
AQUATIVE PLUS (6 ACTUATOR)	1100	8		8800

## → MAXIMUM DISTANCE FROM CONTROLLER TO AQUATIVE PLUS™

Wires cross-section selection for distance installation of G75 solenoids

### → CATALOG NUMBERS

NO. OF ACUATOR(S)	AQUATIVE PLUS CONFIG. 1		AQUATIVE PLUS CONFIG. 2
	AC	DC	DC
1 W/O BRACKETS	35500-001200	35500-001900	35500-001920
1 W/ BRACKETS	35500-001300	35500-002000	-
2 W/ BRACKETS	35500-001400	35500-002100	35500-000710
3 W/ BRACKETS	35500-001500	35500-002200	35500-000711
4 W/ BRACKETS	35500-001600	35500-002300	35500-000712
5 W/ BRACKETS	35500-001700	35500-002400	35500-000713
6 W/ BRACKETS	35500-001800	35500-002500	35500-000714
7 W/ BRACKETS	35500-001360	35500-001361	35500-000715
8 W/ BRACKETS	35500-001850	35500-002530	35500-000718
9 W/ BRACKETS	35500-002531	35500-001860	35500-000717
10 W/ BRACKETS	35500-001870	35500-002550	35500-000718

CABLE GAUGE (AWG)	DIAMETER (MM)	CROSS SECTION (MM²)	AC	DC
			MAX. DISTANCE (M)	MAX. DISTANCE (M)
24	0.5	0.2	600	-
20	0.8	0.5	1250	150
18	1.0	0.8	2000	-
17	1.1	1.0	2500	240
16	1.3	1.3	3500	-
15	1.4	1.5	5000	380

\* Anchoring with 2 screws 10x1.5"

\* Bracket material: Aluminum

# BACCARA™ SOLENOIDS FOR ALL IRRIGATION APPLICATIONS

G75-A Suitable for operation in all applications -  
agriculture, landscape and industry  
(water supply system)

G75-A3P Specially designed for filtration  
systems and large diameters control valves



G75-A



G75-A3P



## Benefits & Features

### → Manual override CLOSE - AUTO - OPEN

Very low energy consumption for maximal wire distance

Optional NC (Normally Closed) or NO (Normally Open) configuration

### → SPECIFICATIONS

MODEL	G75-A	G75-A3P
VOLTAGE	24 VAC	12-18 VDC (LATCH)
PRESSURE RANGE	0 - 12 BAR	0 - 10 BAR
AMBIENT TEMP. MAX	50°C (122°F)	
FLUID TEMP. MAX	50°C (122°F)	
FILTRATION REQUIREMENTS	80 MESH	
INRUSH	125MA	-
HOLDING	125MA	-
PLASTIC PARTS RAW MATERIAL	REINFORCED NYLON	
COMMAND DIAPHRAGM RAW MATERIAL	EPDM	NBR
HYDRAULIC PORTS	1/8" BSP/NPT	
LEADS	2 X AWG22 (0.4 M)	2 X AWG22 (0.3 M)
PULSE WIDTH	-	50MS
PROTECTION CLASS	IP66	

### → RECOMMENDED WORKING CONDITIONS CAPACITOR MODE - FOR DC MODELS

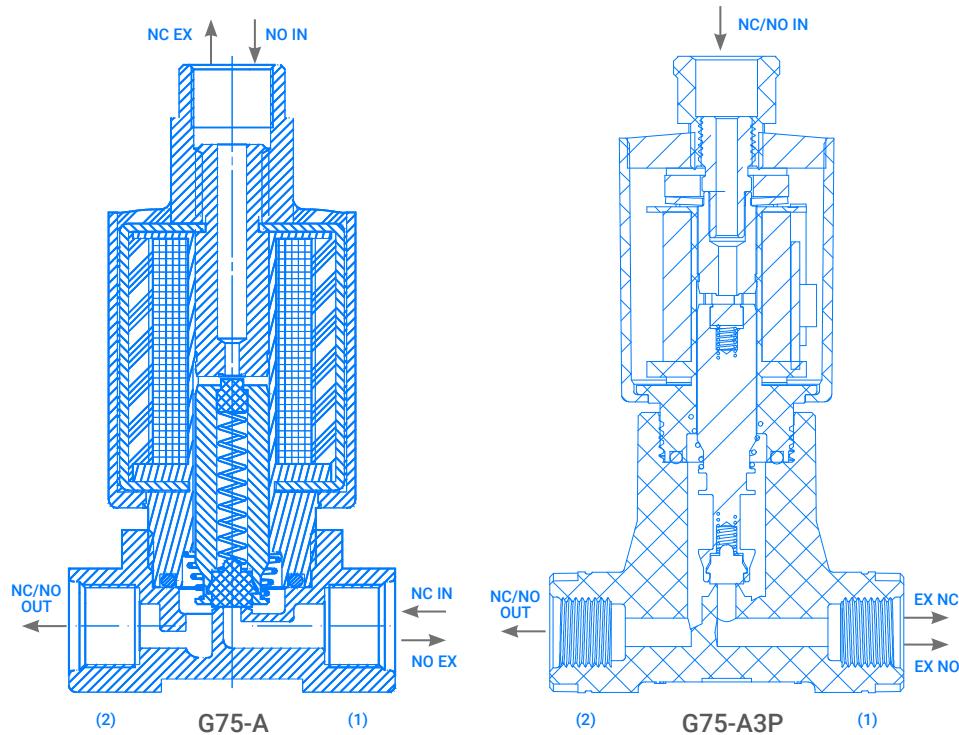
VOLTAGE (VDC)	CAPACITOR (MF)	MIN. PULSE (MS)
12-18	4700	50
18-28	3300	50
28-40	2200	50

G75-A3P NC AND NO HAS THE SAME HYDRAULIC CONNECTION PORTS  
G75-A3P TWO WIRES: RED / BLACK (POLARITY IS RESTRICTED)  
G75-A NC AND NO RING: BLACK (POLARITY IS NOT RESTRICTED)

### → HYDRAULIC CHARACTERISTICS / WATER PASSAGE

MODEL	ORIFICE
G75-A	1.2
G75-A3P	2.6

## → CONFIGURATION



## → CATALOG NUMBERS

NO. OF ACUATOR(S)	G75-A			G75-A3P		
	AC	DC LATCH (N.O)	DC LATCH (N.C)	(2)	(1)	(3)
1 W/ BRACKETS	70800-006810	70800-006805	70800-006905			
2 W/ BRACKETS	70800-006820	70800-006815	70800-006910			
3 W/ BRACKETS	70800-006830	70800-006825	70800-006915			
4 W/ BRACKETS	70800-006840	70800-006835	70800-006920			
5 W/ BRACKETS	70800-006850	70800-006845	70800-006925			
6 W/ BRACKETS	70800-006860	70800-006855	70800-006930			
7 W/ BRACKETS	70800-006870	70800-006865	70800-006935			
8 W/ BRACKETS	70800-006880	70800-006875	70800-006940			
9 W/ BRACKETS	70800-006890	70800-006885	70800-006945			
10 W/ BRACKETS	70800-006900	70800-006895	70800-006950			

\* Anchoring with 2 screws 10x1.5"

\* Bracket material: Aluminum

## → MAXIMUM DISTANCE FROM CONTROLLER TO BACCARA SOLENOIDS

Wires cross-section selection for distance installation of G75 solenoids

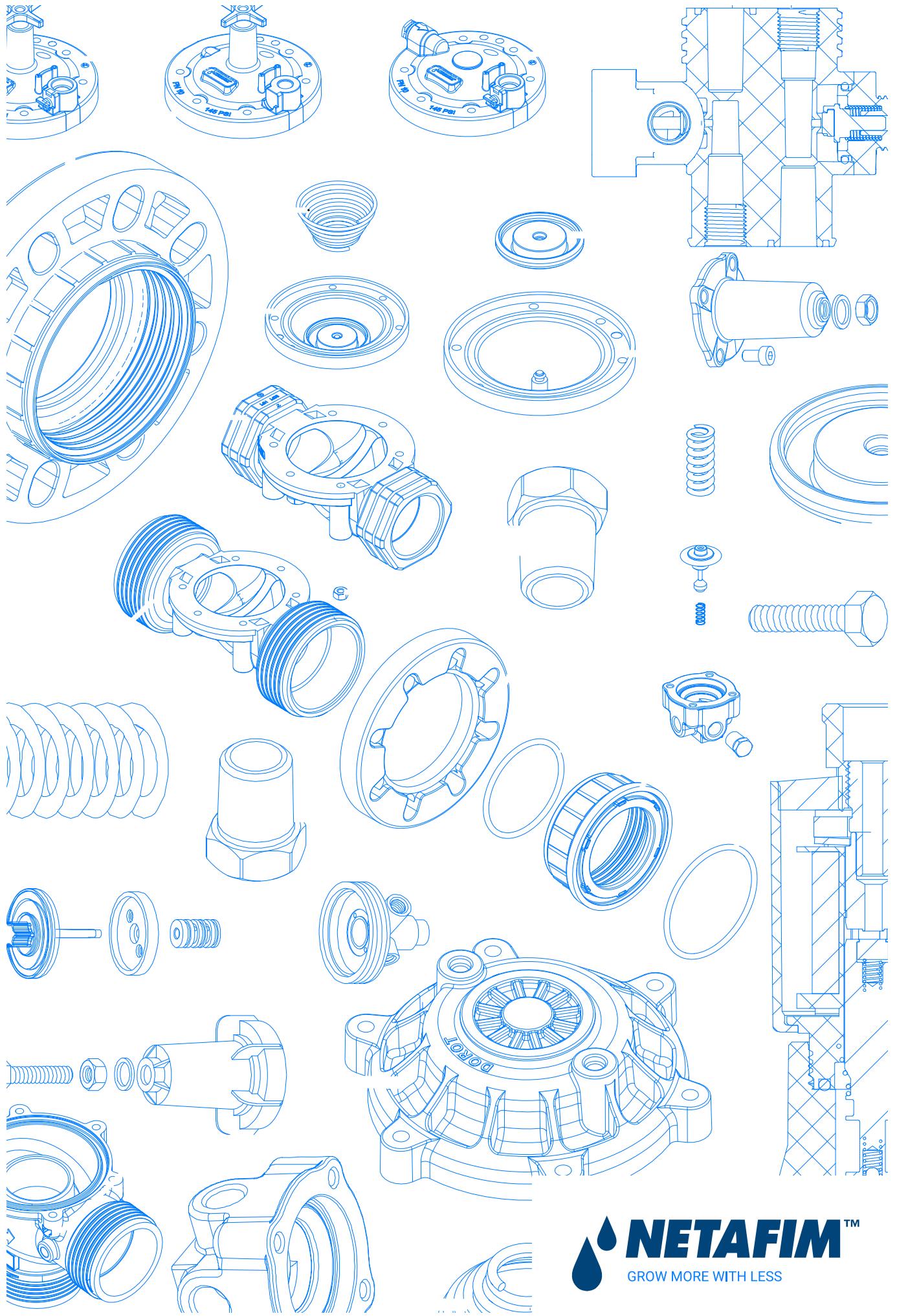
NO. OF SOLE- NOIDS	1	2	3	4	DISTANCE
CROSS SECTION (MM <sup>2</sup> )	0.5	0.5	0.75	1.0	100M
	0.5	1.0	1.5	2.5	200M
	0.75	1.5	2.5	2.5	300M
	1.0	2.5	2.5	4.0	400M
	1.5	2.5	4.0	6.0	500M
	1.5	4.0	4.0	6.0	600M
	2.5	4.0	6.0	6.0	700M
	2.5	4.0	6.0		800M
	2.5	4.5	6.0		900M
	2.5	6.0			1000M

# DOROT™ SOLENOIDS FOR ALL IRRIGATION APPLICATIONS



## → CATALOG NUMBERS

PRODUCT NAME & ILLUSTRATION	CONFIGURATION	VOLTAGE	CATALOG NUMBER			
			OPERATOR	BASE	BASE + BRACKET	OPERATOR + BASE
<b>S-80 2 Way</b>						
	2 WAY (NC)	24AC	71640-007140			-
		24DC	71680-031060	71680-018350	71680-000240	-
		12DC	71640-007020			-
<b>S-80 3 Way</b>						
	3 WAY (NO)	24AC	71640-007120	-	-	71640-006980
		24DC	71680-018310	-	-	71640-006990
		12DC	71640-007021	-	-	-
	3 WAY (NC)	24AC	71640-007130	-	-	71640-007090
<b>S-92 3 Way Latch</b>						
	3 WAY (NO)	DC LATCH	71680-000180	-	-	71640-006992



 **NETAFIM™**  
GROW MORE WITH LESS

# ii.ri™ BLUETOOTH SOLENOIDS SMART IRRIGATION CONTROLLER

Featuring a convenient, quick and user-friendly App with a wide range of plans to manage your irrigation from a smartphone or tablet.



## Benefits & Features

- Wireless operated by smart device

Single station Irrigation Controller

Four irrigation program types

Minimum required iOS 7 or Android V4.3

Battery included



## → 3 WAY HYDRAULIC ADAPTER

PORT	NO	NC
1	EXHAUST	PRESSURE
3	PRESSURE	EXHAUST
COM	OUT	OUT

## → CATALOG NUMBERS

### BASIC VALVES - 80 SERIES

DIAMETER	CONN.	SHAPE	CONF.	CATALOG NUMBER
3/4"	BSP	STRAIGHT	2W	71600-050115
	NPT	STRAIGHT		71600-050116
1"	BSP	STRAIGHT	2W	71600-001266
	NPT	STRAIGHT		71600-050130
1 1/2"	BSP	STRAIGHT	2W	71640-007441
	NPT	STRAIGHT		-
	BSP	ANGLE	3W	71640-007440
	NPT	ANGLE		-
2"	BSP	STRAIGHT	3W	71600-002130
	NPT	STRAIGHT		71610-014389
	BSP	ANGLE	2W	71600-050211
	NPT	ANGLE		71610-014387
3"	BSP	STRAIGHT	2W	71600-050711
	NPT	STRAIGHT		-
	BSP	ANGLE	3W	71640-007810
	NPT	ANGLE		-
3"	BSP	STRAIGHT	3W	71600-002720
	NPT	STRAIGHT		71610-014612
	BSP	ANGLE	2W	71600-002715
	NPT	ANGLE		71600-051010
3"	UNF		3W	-
				71600-051000

## → CATALOG NUMBERS

### ii.ri CONTROLLER

II.RI TYPE	CATALOG NUMBER
II.RI 2-WAY	70800-000803
II.RI 3-WAY	70800-008805



Simply look for ii.ri smart irrigation controller app on:



# COMPLEMENTARY ACCESSORIES

## → CATALOG NUMBERS - FITTINGS

ILLUSTRATION	DESCRIPTION	CATALOG NUMBERS
	ELBOW CONNECTOR 1/8"-8MM	76400-003400
	ELBOW CONNECTOR 1/4"-8MM	76400-003500
	STRAIGHT CONNECTOR 1/8"-8MM	76400-002100
	STRAIGHT CONNECTOR 1/4"-8MM	76400-002300
	T-CONNECTOR FOR TUBE 8MM- 1/8"-8MM	76400-004450
	T-CONNECTOR FOR TUBE 8MM-1/4"-8MM	71680-018575
	MALE PLUG 1/4" NPT	71610-000800
	MALE PLUG 3/8" NPT	71610-000810
	1/4" SELF-FLUSHING, INLINE CONTROL-FILTER	76400-013755
	TEFEN UNION CONNECTOR 8 MM	76400-001300
	TEFEN UNION TEE 8 MM	76400-004000
	TEFEN MALE RUN TEE 8 X 8 X 1/8	76400-004550
	TEFEN PIPE REDUCING NIPPLE 1/4"-1/8"	76400-006600
	TEFEN PIPE REDUCING NIPPLE 1/2"- 1/4"	76400-006900
	SELF-FLUSHING, INLINE CONTROL FILTER 1/2"	71680-014100
	BUSHING MALE-FEMALE 1/2" - 1/4"	78301-003170

→ CATALOG NUMBERS - PRESSURE GAUGES

DESCRIPTION	CATALOG NUMBER
<b>Bottom Inlet Glycerin Gauge</b>	
NPG 2½" GLC 0-4 BAR ¼" BSP	77456-000222
NPG 2½" GLC 0-6 BAR ¼" BSP	77456-000223
NPG 2½" GLC 0-8 BAR ¼" BSP	77456-000224
NPG 2½" GLC 0-10 BAR ¼" BSP	77456-000225
NPG 2½" GLC 0-16 BAR ¼" BSP	77456-000226
NPG 2½" GLC 0-4 BAR ¼" NPT	77456-000227
NPG 2½" GLC 0-6 BAR ¼" NPT	77456-000228
NPG 2½" GLC 0-8 BAR ¼" NPT	77456-000229
NPG 2½" GLC 0-10 BAR ¼" NPT	77456-000230
NPG 2½" GLC 0-16 BAR ¼" NPT	77456-000231



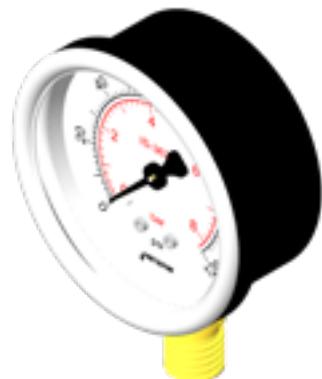
**Rear Inlet Glycerin Gauge**

NPG AX 2½" GLC 0-4 BAR ¼" BSP	77456-000232
NPG AX 2½" GLC 0-6 BAR ¼" BSP	77456-000233
NPG AX 2½" GLC 0-8 BAR ¼" BSP	77456-000234
NPG AX 2½" GLC 0-10 BAR ¼" BSP	77456-000235
NPG AX 2½" GLC 0-16 BAR ¼" BSP	77456-000236
NPG AX 2½" GLC 0-4 BAR ¼" NPT	77456-000237
NPG AX 2½" GLC 0-6 BAR ¼" NPT	77456-000238
NPG AX 2½" GLC 0-8 BAR ¼" NPT	77456-000239
NPG AX 2½" GLC 0-10 BAR ¼" NPT	77456-000240
NPG AX 2½" GLC 0-16 BAR ¼" NPT	77456-000241



**Bottom Inlet Dry Gauge**

NPG 2½" DRY 0-4 BAR ¼" BSP	77456-000100
NPG 2½" DRY 0-6 BAR ¼" BSP	77456-000101
NPG 2½" DRY 0-8 BAR ¼" BSP	77456-000210
NPG 2½" DRY 0-10 BAR ¼" BSP	77456-000103
NPG 2½" DRY 0-16 BAR ¼" BSP	77456-000104
NPG 2½" DRY 0-4 BAR ¼" NPT	77456-000120
NPG 2½" DRY 0-6 BAR ¼" NPT	77456-000121
NPG 2½" DRY 0-8 BAR ¼" NPT	77456-000211
NPG 2½" DRY 0-10 BAR ¼" NPT	77456-000123
NPG 2½" DRY 0-16 BAR ¼" NPT	77456-000124



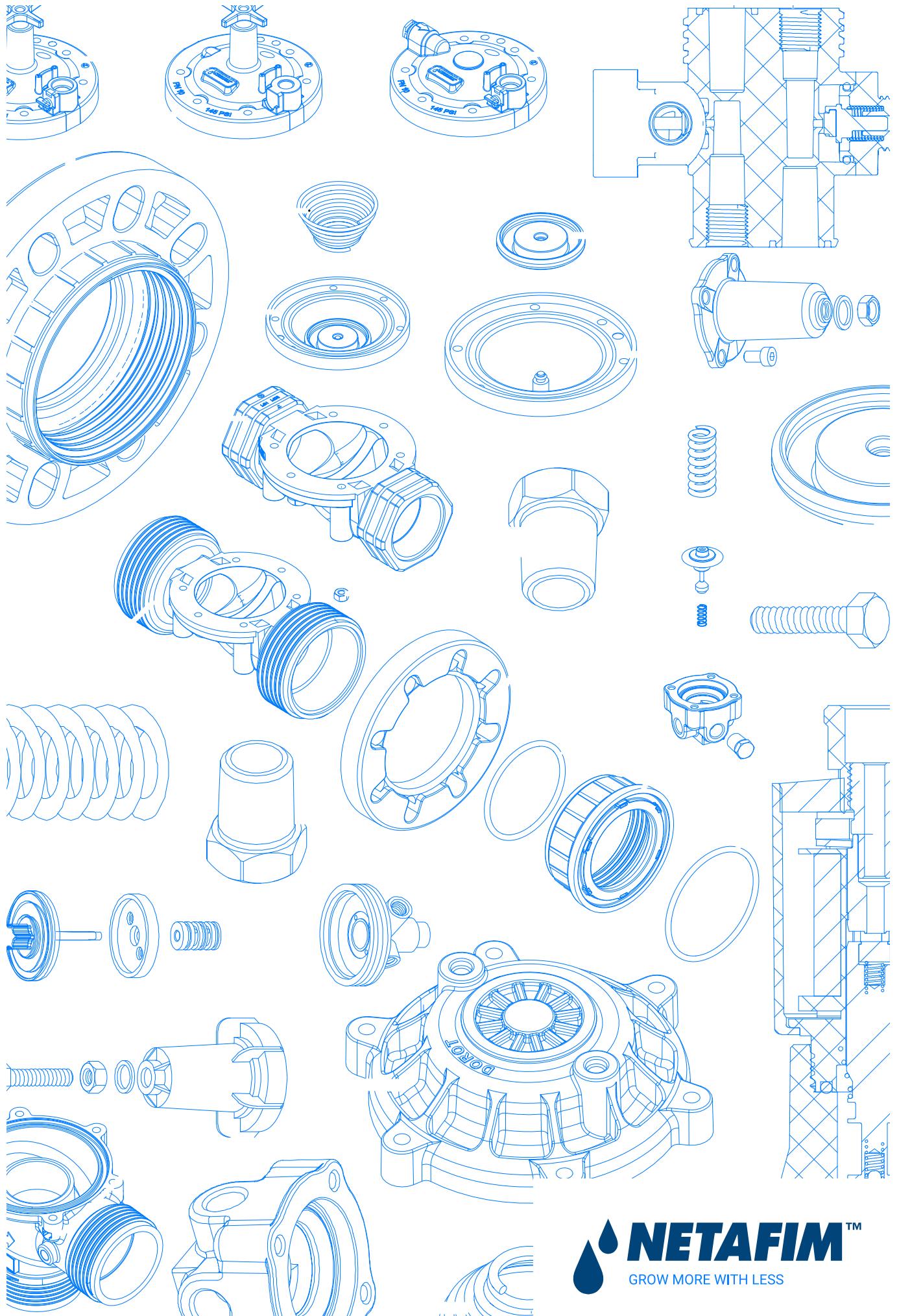
**Rear Inlet Dry Gauge**

NPG AX 2½" DRY 0-4 BAR ¼" BSP	77456-000212
NPG AX 2½" DRY 0-6 BAR ¼" BSP	77456-000213
NPG AX 2½" DRY 0-8 BAR ¼" BSP	77456-000214
NPG AX 2½" DRY 0-10 BAR ¼" BSP	77456-000215
NPG AX 2½" DRY 0-16 BAR ¼" BSP	77456-000216
NPG AX 2½" DRY 0-4 BAR ¼" NPT	77456-000217
NPG AX 2½" DRY 0-6 BAR ¼" NPT	77456-000218
NPG AX 2½" DRY 0-8 BAR ¼" NPT	77456-000219
NPG AX 2½" DRY 0-10 BAR ¼" NPT	77456-000220
NPG AX 2½" DRY 0-16 BAR ¼" NPT	77456-000221



→ CATALOG NUMBERS - ADDITIONAL COMPONENTS

PRODUCT ILLUSTRATION	PRODUCT DESCRIPTION	CATALOG NUMBER
<b>3-Way Brass Valves</b>		
	NMV BR BALL VLV 3W 1/4" MTH 1/8" FTH BSP	77455-000200
	NMV BR BALL VLV 3W 1/4" MTH 1/8" FTH NPT	77455-000201
	NMV BR BALL VLV 3W 1/4" MTH 1/4" FTH BSP	77455-000202
	NMV BR BALL VLV 3W 1/4" MTH 1/4" FTH NPT	77455-000203
<b>Brass Model</b>		
	PRESSURE GAUGE VALVE 1/4 SM	76040-001100
* 1/4" NPT male x female threaded connection * Max. Working Pressure: 25 Bar		
<b>Plastic Model</b>		
	NPG 1/4" MTH-FTH BSP VALVE	77456-000180
* System vibration not affect the pressure gauge. * 1/4" BSP or NPT male x female threaded connection * Max. Working Pressure: 6 Bar * All parts are chemical/corrosion resistant, color UV stabilized.		
<b>Pressure Gauge PITOT Needle</b>		
	NPG PITOT NEEDLE 1/4" BSP	77456-000200
	NPG PITOT NEEDLE 1/4" NPT	77456-000201
* 1/4" thread for direct connection to the pressure gauge * Fits into dedicated measuring points (see below), allowing measuring pressure at any given point along the system.		
<b>Pressure Measuring Point</b>		
	PRESSURE MEASURING POINT - BARB	63000-002800
	PRESSURE MEASURING POINT - 1/8" BSP	63000-002750



**NETAFIM™**  
GROW MORE WITH LESS

# CONTROL VALVES APP.

A one of its kind tool for designers,  
dealers & end-users!



## Benefits & Features

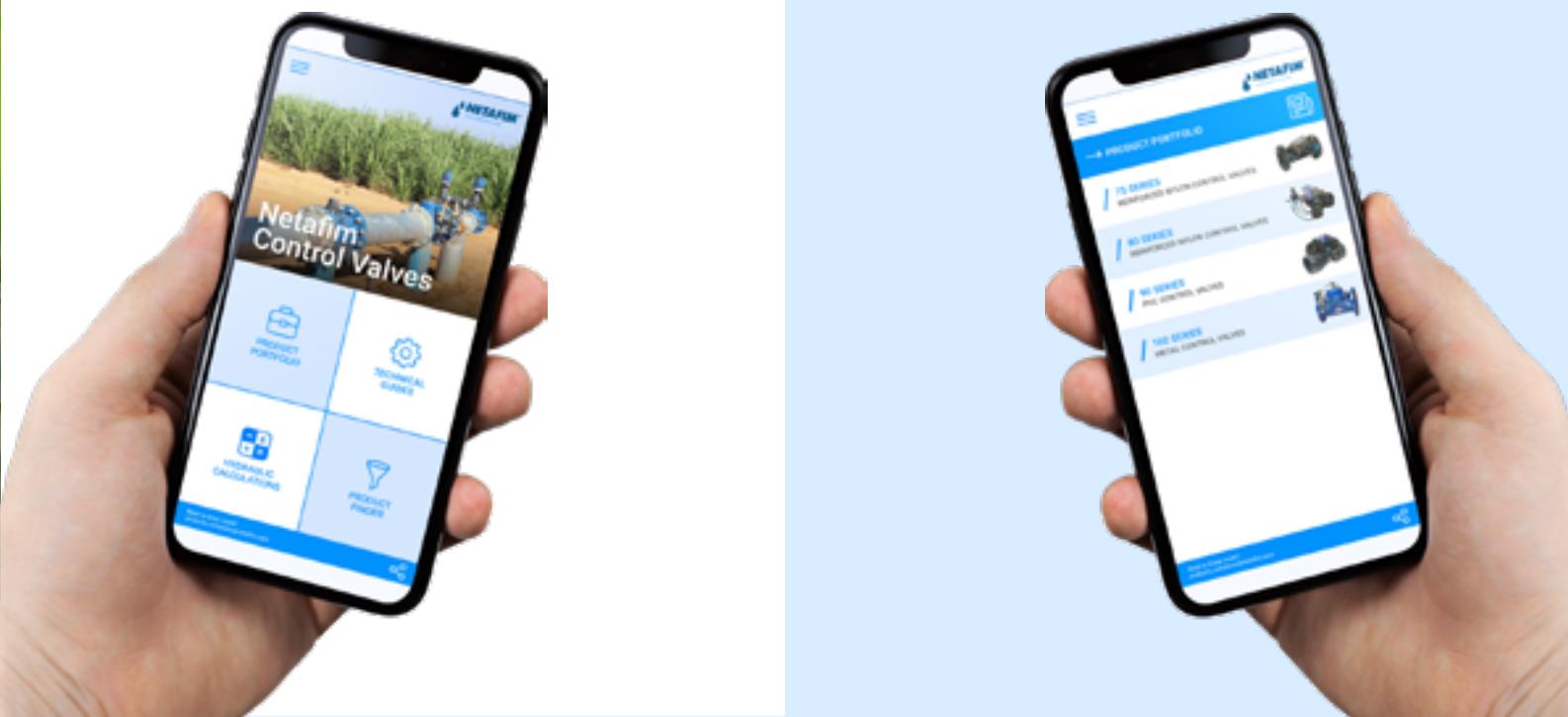
- Product portfolio A section you'll find a digital catalog that contains various product sheets
- Technical guides Any technical material that can assist to select, install and maintain a valve
- Hydraulic calculations Simply calculating the valves head loss, recommended flow rates, etc.
- Product finder A list of standard products that is extremely easy to select from. Plus, a quick guide for selecting unique products

Simply look for Netafim Control Valvess app on:



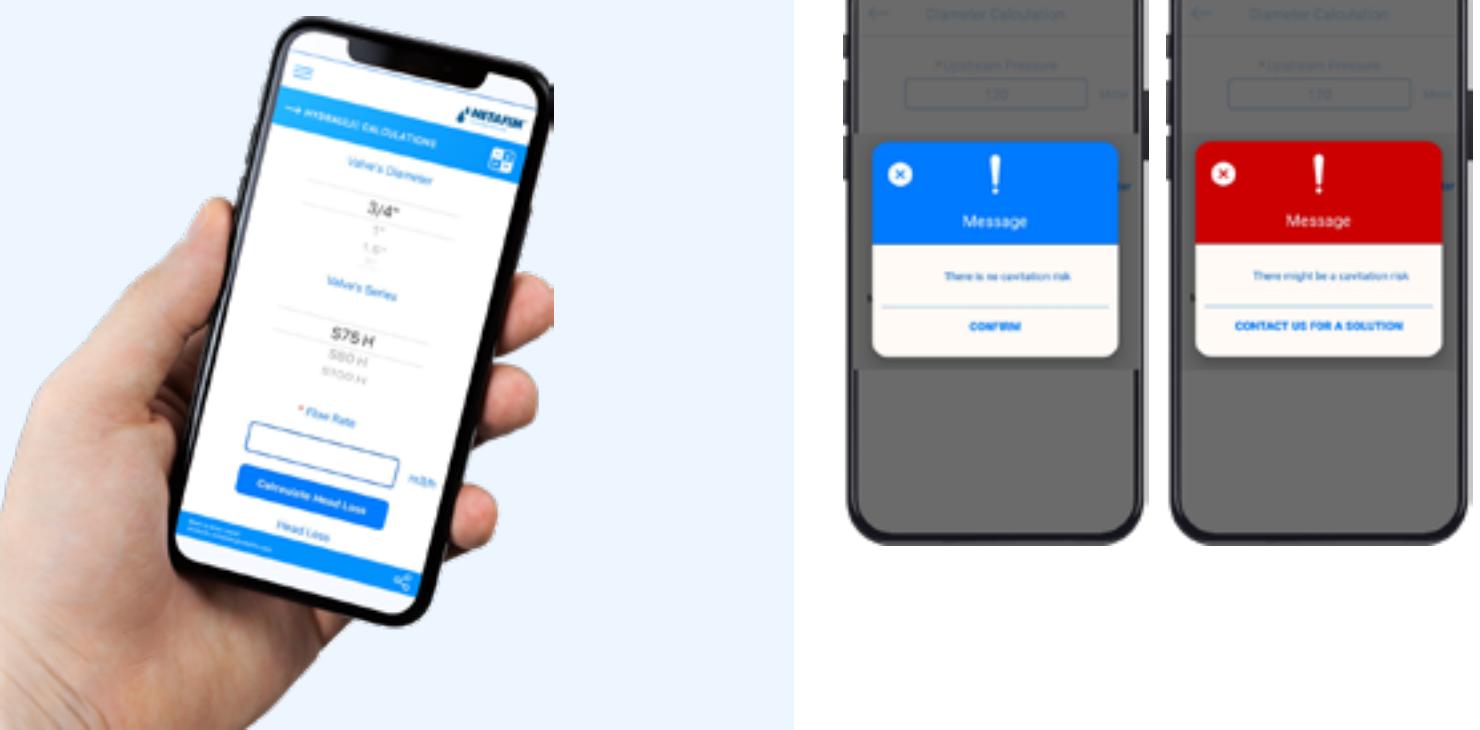
→ HOMESCREEN

→ PRODUCT SHEETS



→ HYDRAULIC CALCULATIONS

→ SMART ALERTS



# TRUE UNION BALL VALVES

Physical shut off, manual restrictions, control or service needs in irrigation head controls, field plots, nurseries, greenhouses, Nutrigation™ systems, water conveyance systems.



High Quality



Ultimate Durability



Durable & Reliable

## Benefits & Features

### → Saves operation costs

A quarter turn shut off valve, threaded or glued socket, user friendly design allowing smooth handle operation

Corrosion resistant and UV stabilized

A true union ball valve, specifically designed for water application and for safe pipe line operation

### → Saves labor costs and multiple investments in maintenance

In the closed position, the pipeline can be disconnected downstream from the valve without any leakage

The valve is removable from the pipeline, allowing quick maintenance

Highly reliable operation and durable over time

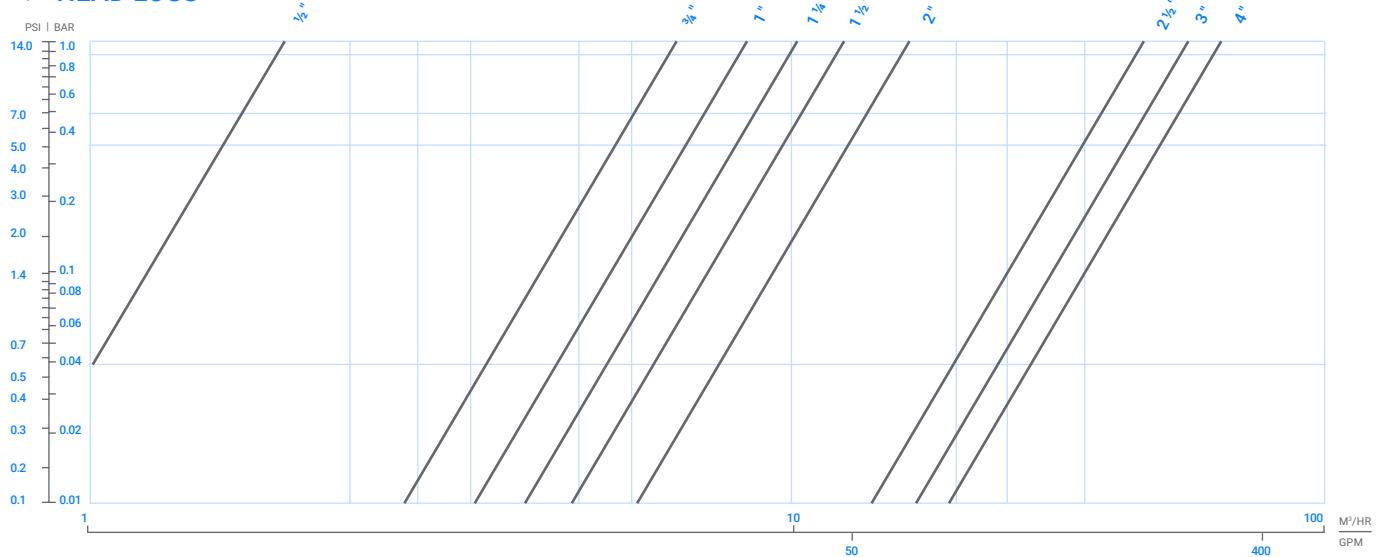
## Specifications & Recommendations

- Ideal for application in temperature range of -5°C and 50°C, guaranteeing optimal performance in terms of mechanical resistance, good rigidity, low coefficients of thermal expansion and optimal safety factors in service
- Operational up to 10 bar
- Low head losses
- Wide range of connections:  
Threaded (BSP or NPT standards) or SG, socket glued (ISO/DIN, ASTM, BS)

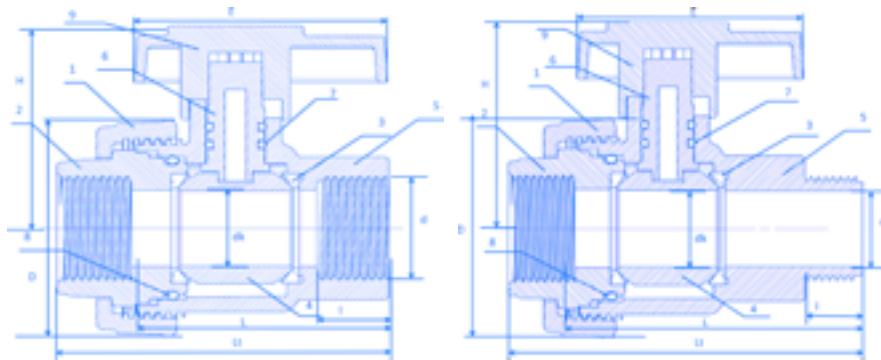
## → PACKAGING DATA

MODEL	QUANTITY P/BOX UNIT	BOX SIZES (CM X CM X CM)	FEMALE-FEMALE THREADED CONNECTION BOX WEIGHT (KG)	MALE-FEMALE THREADED CONNECTION BOX WEIGHT (KG)	SOCKET GLUED CONNECTION BOX WEIGHT (KG)	BOXES P/PALLET
½" - 20MM	150	43.0 X 33.0 X 39.0	24.55	26.00	24.70	12
¾" - 25MM	150		22.11	23.83	22.33	
1" - 32MM	75		17.03	17.74	16.84	
1¼" - 40MM	50		17.54	18.09	17.34	
1½" - 50MM	16		10.91	10.58	10.53	
2" - 63MM	8		8.68	8.90	8.52	
2½" - 75 MM	8		12.08	12.04	11.86	
3" - 90MM	4		15.93	13.09	12.85	
4" - 110MM	2		9.84	9.64	9.84	

## → HEAD LOSS



→ TECHNICAL DIMENSIONS TRUE UNION BALL VALVES  $\frac{1}{2}$ ",  $\frac{3}{4}$ ", 1",  $1\frac{1}{4}$ "



Inlet connector - threaded male / Outlet connector - threaded female

nom size \	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
$\frac{1}{2}$ "	14.00	14.00	20.00	60.00	16.00	80.20	99.15	60.80	56.50
$\frac{3}{4}$ "	14.00	14.00	20.00	60.00	18.00	80.20	99.15	60.80	56.50
1"	11.00	11.50	24.50	69.00	17.70	89.00	110.40	71.00	66.45
$1\frac{1}{4}$ "	11.00	11.50	31.80	79.50	25.70	88.00	122.80	105.00	70.30

Inlet connector - threaded female / Outlet connector - threaded female

nom size \	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
$\frac{1}{2}$ "	14.00	14.00	20.00	60.00	16.00	63.50	82.60	60.80	56.50
$\frac{3}{4}$ "	14.00	14.00	20.00	60.00	18.00	63.50	82.60	60.80	55.50
1"	11.00	11.50	24.50	69.00	19.55	70.50	93.00	71.00	66.45
$1\frac{1}{4}$ "	11.00	11.50	31.80	79.50	27.40	88.00	122.80	105.00	70.30

Inlet connector - socket glued / Outlet connector - socket glued

nom size \	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
20MM	20.20	20.20	20.00	60.00	16.00	63.50	82.60	60.80	56.60
25MM	25.00	25.00	20.00	60.00	18.00	63.50	82.60	60.80	55.60
32MM	32.00	32.00	24.50	69.00	19.55	70.50	93.00	71.00	66.45
40MM	40.00	40.00	31.80	79.50	27.40	88.00	122.80	105.00	70.30

Inlet connector - socket glued / Outlet connector - socket glued

nom size \	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
$\frac{1}{2}$ "	21.20	21.40	20.00	60.00	18.00	63.50	82.60	60.80	55.60
$\frac{3}{4}$ "	26.67	26.00	20.00	60.00	18.00	63.50	82.60	60.80	55.60
1"	33.40	34.00	24.50	69.00	19.55	70.50	93.00	71.00	66.45
$1\frac{1}{4}$ "	42.16	42.00	31.80	79.50	27.40	88.00	122.80	105.00	70.30

→ MATERIAL Specs

PVC BALL VALVES

$\frac{1}{2}$ ",  $\frac{3}{4}$ ", 1",  $1\frac{1}{4}$ "

#	PART NAME	MATERIAL	QTY.
1	RING	UPVC	1
2	BUSH**	UPVC	1
3	SEAL	TPE	2
4	BALL	UPVC	1
5	BODY	UPVC	1
6	SHAFT	UPVC	1
7	SHAFT O-RING	HNBR	2
8	MAIN O-RING**	HNBR	1
9	HANDLE	ABS	1
10	THREADED BUSH*	UPVC	1
11	BUSH BIG O-RING*	HNBR	1
12	BUSH SMALL O-RING*	HNBR	1
13	SOCKET*	UPVC	1

\*  $1\frac{1}{4}$ " Ball Valve

\*\*  $\frac{3}{4}$ " Ball Valve

→ MATERIAL Specs

POLYPROPYLENE

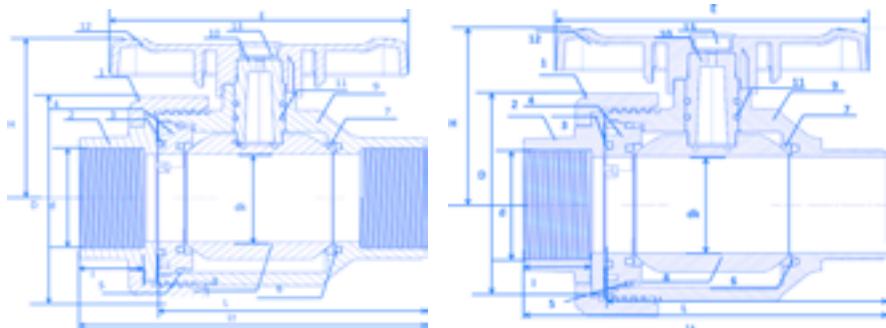
BALL VALVES  $\frac{1}{2}$ ",  $\frac{3}{4}$ ", 1",  $1\frac{1}{4}$ "

#	PART NAME	MATERIAL	QTY.
1	RING	UPVC	1
2	BUSH**	UPVC	1
3	SEAL	TPE	2
4	BALL	UPVC	1
5	BODY	UPVC	1
6	SHAFT	UPVC	1
7	SHAFT O-RING	HNBR	2
8	MAIN O-RING**	HNBR	1
9	HANDLE	ABS	1

\*  $1\frac{1}{4}$ " ball valve

\*\*  $\frac{3}{4}$ " ball valve

→ TECHNICAL DIMENSIONS TRUE UNION BALL VALVES 1½", 2", 2½", 3"



Inlet - threaded male / Outlet connector - threaded female

nom size	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
1½"	11.00	11.50	39.40	94.40	32.00	98.50	136.60	121.00	90.80
2"	11.00	11.50	49.50	116.00	35.40	119.00	164.80	150.00	97.00
2½"	11.00	8.00	59.00	131.60	45.50	139.50	197.20	162.00	110.00
3"	11.00	8.00	76.00	178.80	42.80	180.00	230.40	200.40	139.00

Inlet connector - threaded female / Outlet connector - threaded female

nom size	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
1½"	11.00	11.50	39.40	94.40	32.00	76.60	148.80	121.00	88.30
2"	11.00	11.50	49.50	116.00	35.40	119.00	164.80	150.00	97.00
2½"	11.00	8.00	59.00	131.60	45.50	140.85	195.40	162.00	110.00
3"	11.00	8.00	76.00	178.80	42.80	178.10	250.00	200.40	139.00

Inlet connector - socket glued / Outlet connector - socket glued

nom size	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
50MM	50.00	50.00	39.40	94.40	32.00	76.60	148.80	121.00	88.30
63MM	63.00	63.00	49.50	116.00	35.40	88.00	175.40	150.00	97.00
75MM	75.00	75.00	59.00	131.60	45.50	140.85	195.40	162.00	110.00
90MM	90.00	90.00	76.00	178.80	42.80	178.10	250.00	200.40	139.00

Inlet connector - socket glued / Outlet connector - socket glued

nom size	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
1½"	48.26	48.00	39.40	94.40	32.00	76.60	148.80	121.00	88.30
2"	60.33	60.00	49.50	116.00	35.40	88.00	175.40	150.00	97.00
2½"	73.03	75.00	59.00	131.60	45.50	140.85	195.40	162.00	110.00
3"	88.90	89.00	76.00	178.80	42.80	178.10	250.00	200.40	139.00

→ MATERIAL Specs

PVC BALL VALVES

1½", 2", 2½", 3"

#	PART NAME	MATERIAL	QTY.
1	RING	UPVC	1
2	SOCKET	UPVC	1
3	BUSH SMALL O-RING	HNBR	1
4	BUSH	UPVC	1
5	BUSH BIG O-RING	HNBR	1
6	SEAL WASHER*	HNBR	2
7	SEAL	TPE	2
8	BALL	UPVC	1
9	BODY	UPVC	1
10	SHAFT	UPVC	1
11	SHAFT O-RING**	HNBR	1
12	HANDLE	ABS	1
13	HANDLE LOGO	ABS	1

\* 3" ball valve

\*\* 2" Model

→ MATERIAL Specs

POLYPROPYLENE

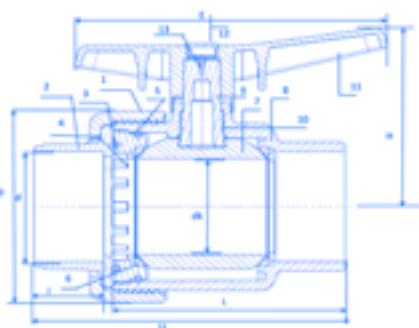
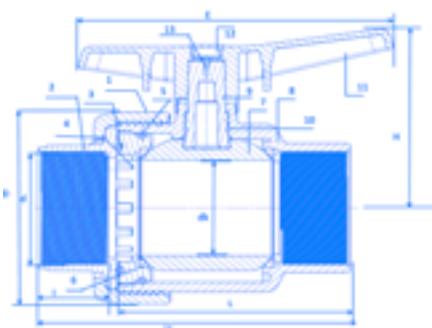
BALL VALVES 1½", 2", 2½", 3"

#	PART NAME	MATERIAL	QTY.
1	RING	PPGF	1
2	SOCKET	***UPVC / PPGF	1
3	BUSH SMALL O-RING	HNBR	1
4	BUSH	UPVC	1
5	BUSH BIG O-RING	HNBR	1
6	*SEAL WASHER	HNBR	2
7	SEAL	TPE	2
8	BALL	UPVC	1
9	BODY	PPGF	1
10	SHAFT	UPVC	1
11	SHAFT O-RING	HNBR	**2
12	HANDLE	PPGF	1
13	HANDLE LOGO	PPGF	1

\* Only in 3" Ball valve, \*\* one in 2" Model

\*\*\* UPVC for solvent socket and PPGF for Threaded socket

→ TECHNICAL DIMENSIONS TRUE UNION BALL VALVES 4"



**Inlet Connector - Threaded Male / Outlet Connector - Threaded Female**

SIZE	NOM	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
4"		11.00	8.00	98.30	197.00	60.00	200.00	268.00	270.10	186.00

**Inlet Connector - Threaded Female /Outlet Connector - Threaded Female**

SIZE	NOM	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
4"		11.00	8.00	98.30	197.00	60.00	200.00	268.00	270.10	186.00

**Inlet Connector - Socket Glued / Outlet Connector - Socket Glued**

SIZE	NOM	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
110MM	110.00	110.00	110.00	98.30	196.50	60.00	200.00	268.00	270.10	186.00

**Inlet Connector - Socket Glued / Outlet Connector - Socket Glued**

SIZE	NOM	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
4"		114.30	114.00	98.30	196.50	60.00	200.00	268.00	270.10	186.00

→ MATERIAL Specs  
PVC BALL VALVES 4"

#	PART NAME	MATERIAL	QTY.
1	RING	UPVC	1
2	SOCKET	UPVC	1
3	BUSH SMALL O-RING	HNBR	1
4	BUSH	UPVC	1
5	BUSH BIG O-RING	HNBR	1
6	SEAL	TPE	2
7	BALL	UPVC	1
8	BODY	UPVC	1
9	SHAFT	UPVC	1
10	SHAFT O-RING	HNBR	3
11	HANDLE	ABS	1
12	HANDLE LOGO	ABS	1

→ MATERIAL Specs  
PLYPROPYLENE BALL VALVES 4"

#	PART NAME	MATERIAL	QTY.
1	RING	PPGF	1
2	SOCKET	***UPVC /PPGF	1
3	BUSH SMALL O-RING	NBR	1
4	BUSH	UPVC	1
5	BUSH BIG O-RING	NBR	1
6	SEAL	TPE	2
7	BALL	UPVC	1
8	BODY	PPGF	1
9	SHAFT	UPVC	1
10	SHAFT O-RING	NBR	3
11	HANDLE	PPGF	1
12	HANDLE LOGO	PPGF	1
13	HANDLE SCREW	SS	1

\*\*\* UPVC for solvent socket and PPGF for Threaded socket

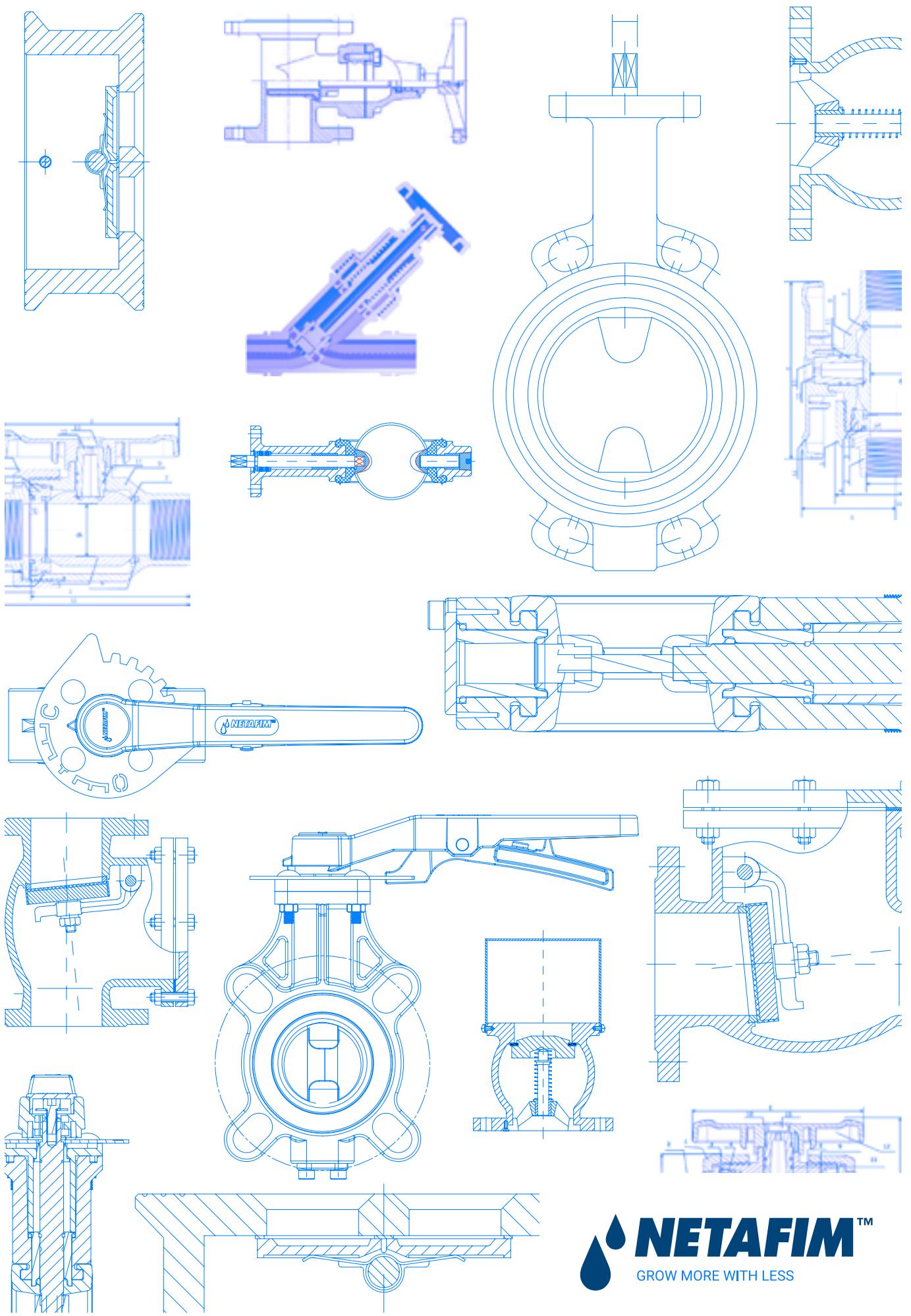
→ CATALOG NUMBERS TRUE UNION BALL VALVES

DESCRIPTION	CAT. NUMBER
NMV PVC BALL VLV 1 UNION ½" FFT BSP	77450-000216
NMV PVC BALL VLV 1 UNION ¾" FFT BSP	77450-000100
NMV PVC BALL VLV 1 UNION 1" FFT BSP	77450-000101
NMV PVC BALL VLV 1 UNION 1¼" FFT BSP	77450-000102
NMV PVC BALL VLV 1 UNION 1½" FFT BSP	77450-000103
NMV PVC BALL VLV 1 UNION 2" FFT BSP	77450-000104
NMV PVC BALL VLV 1 UNION 2½" FFT BSP	77450-000105
NMV PVC BALL VLV 1 UNION 3" FFT BSP	77450-000106
NMV PVC BALL VLV 1 UNION 4" FFT BSP	77450-000107
NMV PVC BALL VLV 1 UNION ½" FFT NPT	77450-000217
NMV PVC BALL VLV 1 UNION ¾" FFT NPT	77450-000208
NMV PVC BALL VLV 1 UNION 1" FFT NPT	77450-000209
NMV PVC BALL VLV 1 UNION 1¼" FFT NPT	77450-000210
NMV PVC BALL VLV 1 UNION 1½" FFT NPT	77450-000211
NMV PVC BALL VLV 1 UNION 2" FFT NPT	77450-000212
NMV PVC BALL VLV 1 UNION 2½" FFT NPT	77450-000213
NMV PVC BALL VLV 1 UNION 3" FFT NPT	77450-000214
NMV PVC BALL VLV 1 UNION 4" FFT NPT	77450-000215
NMV PVC BALL VLV 1 UNION ½" FMT BSP	77450-000218
NMV PVC BALL VLV 1 UNION ¾" FMT BSP	77450-000120
NMV PVC BALL VLV 1 UNION 1" FMT BSP	77450-000121
NMV PVC BALL VLV 1 UNION 1¼" FMT BSP	77450-000122
NMV PVC BALL VLV 1 UNION 1.1/2" FMT BSP	77450-000123
NMV PVC BALL VLV 1 UNION 2" FMT BSP	77450-000124
NMV PVC BALL VLV 1 UNION 2½" FMT BSP	77450-000125
NMV PVC BALL VLV 1 UNION 3" FMT BSP	77450-000126
NMV PVC BALL VLV 1 UNION 4" FMT BSP	77450-000127
NMV PVC BALL VLV 1 UNION ½" FMT NPT	77450-000219
NMV PVC BALL VLV 1 UNION ¾" FMT NPT	77450-000149
NMV PVC BALL VLV 1 UNION 1" FMT NPT	77450-000150
NMV PVC BALL VLV 1 UNION 1¼" FMT NPT	77450-000152
NMV PVC BALL VLV 1 UNION 1½" FMT NPT	77450-000153
NMV PVC BALL VLV 1 UNION 2" FMT NPT	77450-000151
NMV PVC BALL VLV 1 UNION 2½" FMT NPT	77450-000154
NMV PVC BALL VLV 1 UNION 3" FMT NPT	77450-000155
NMV PVC BALL VLV 1 UNION 4" FMT NPT	77450-000156

DESCRIPTION	CAT. NUMBER
NMV PVC BALL VLV 1 UNION 20MM SG ISO/D	77450-000220
NMV PVC BALL VLV 1 UNION 25MM SG ISO/D	77450-000200
NMV PVC BALL VLV 1 UNION 32MM SG ISO/D	77450-000201
NMV PVC BALL VLV 1 UNION 40MM SG ISO/D	77450-000202
NMV PVC BALL VLV 1 UNION 50MM SG ISO/D	77450-000203
NMV PVC BALL VLV 1 UNION 63MM SG ISO/D	77450-000204
NMV PVC BALL VLV 1 UNION 75MM SG ISO/D	77450-000205
NMV PVC BALL VLV 1 UNION 90MM SG ISO/D	77450-000206
NMV PVC BALL VLV 1 UNION 110MM SG ISO/D	77450-000207
NMV PVC BALL VLV 1 UNION ½" SG BS	77450-000221
NMV PVC BALL VLV 1 UNION ¾" SG BS	77450-000360
NMV PVC BALL VLV 1 UNION 1" SG BS	77450-000361
NMV PVC BALL VLV 1 UNION 1¼" SG BS	77450-000362
NMV PVC BALL VLV 1 UNION 1½" SG BS	77450-000108
NMV PVC BALL VLV 1 UNION 2" SG BS	77450-000350
NMV PVC BALL VLV 1 UNION 2½" SG BS	77450-000109
NMV PVC BALL VLV 1 UNION 3" SG BS	77450-000110
NMV PVC BALL VLV 1 UNION 4" SG BS	77450-000367
NMV PVC BALL VLV 1 UNION ½" SG ASTM	77450-000380
NMV PVC BALL VLV 1 UNION ¾" SG ASTM	77450-000381
NMV PVC BALL VLV 1 UNION 1" SG ASTM	77450-000382
NMV PVC BALL VLV 1 UNION 1¼" SG ASTM	77450-000383
NMV PVC BALL VLV 1 UNION 1½" SG ASTM	77450-000384
NMV PVC BALL VLV 1 UNION 2" SG ASTM	77450-000385
NMV PVC BALL VLV 1 UNION 2½" SG ASTM	77450-000386
NMV PVC BALL VLV 1 UNION 3" SG ASTM	77450-000387
NMV PVC BALL VLV 1 UNION 4" SG ASTM	77450-000388

→ CATALOG NUMBERS POLYPROPYLENE TRUE UNION BALL VALVES

DESCRIPTION	CAT. NUMBER	DESCRIPTION	CAT. NUMBER
NMV PP BALL VLV 1 UNION ¾" FFT BSP	77449-000101	NMV PP BALL VLV 1 UNION 25MM SG ISO/D	77449-000201
NMV PP BALL VLV 1 UNION 1" FFT BSP	77449-000102	NMV PP BALL VLV 1 UNION 32MM SG ISO/D	77449-000202
NMV PP BALL VLV 1 UNION 1¼" FFT BSP	77449-000103	NMV PP BALL VLV 1 UNION 40MM SG ISO/D	77449-000203
NMV PP BALL VLV 1 UNION 1½" FFT BSP	77449-000104	NMV PP BALL VLV 1 UNION 50MM SG ISO/D	77449-000204
NMV PP BALL VLV 1 UNION 2" FFT BSP	77449-000105	NMV PP BALL VLV 1 UNION 63MM SG ISO/D	77449-000205
NMV PP BALL VLV 1 UNION 2½" FFT BSP	77449-000106	NMV PP BALL VLV 1 UNION 75MM SG ISO/D	77449-000206
NMV PP BALL VLV 1 UNION 3" FFT BSP	77449-000107	NMV PP BALL VLV 1 UNION 90MM SG ISO/D	77449-000207
NMV PP BALL VLV 1 UNION 4" FFT BSP	77449-000108	NMV PP BALL VLV 1 UNION 110MM SG ISO/D	77449-000208
NMV PP BALL VLV 1 UNION ¾" FFT NPT	77449-000131	NMV PP BALL VLV 1 UNION ¾" SG ASTM	77449-000221
NMV PP BALL VLV 1 UNION 1" FFT NPT	77449-000132	NMV PP BALL VLV 1 UNION 1" SG ASTM	77449-000222
NMV PP BALL VLV 1 UNION 1¼" FFT NPT	77449-000133	NMV PP BALL VLV 1 UNION 1¼" SG ASTM	77449-000223
NMV PP BALL VLV 1 UNION 1½" FFT NPT	77449-000134	NMV PP BALL VLV 1 UNION 1½" SG ASTM	77449-000224
NMV PP BALL VLV 1 UNION 2" FFT NPT	77449-000135	NMV PP BALL VLV 1 UNION 2" SG ASTM	77449-000225
NMV PP BALL VLV 1 UNION 2½" FFT NPT	77449-000136	NMV PP BALL VLV 1 UNION 2½" SG ASTM	77449-000226
NMV PP BALL VLV 1 UNION 3" FFT NPT	77449-000137	NMV PP BALL VLV 1 UNION 3" SG ASTM	77449-000227
NMV PP BALL VLV 1 UNION 4" FFT NPT	77449-000138	NMV PP BALL VLV 1 UNION 4" SG ASTM	77449-000228
NMV PP BALL VLV 1 UNION ¾" FMT BSP	77449-000151	NMV PP BALL VLV 1 UNION ¾" SG BS	77449-000241
NMV PP BALL VLV 1 UNION 1" FMT BSP	77449-000152	NMV PP BALL VLV 1 UNION 1" SG BS	77449-000242
NMV PP BALL VLV 1 UNION 1¼" FMT BSP	77449-000153	NMV PP BALL VLV 1 UNION 1¼" SG BS	77449-000243
NMV PP BALL VLV 1 UNION 1½" FMT BSP	77449-000154	NMV PP BALL VLV 1 UNION 1½" SG BS	77449-000244
NMV PP BALL VLV 1 UNION 2" FMT BSP	77449-000155	NMV PP BALL VLV 1 UNION 2" SG BS	77449-000245
NMV PP BALL VLV 1 UNION 2½" FMT BSP	77449-000156	NMV PP BALL VLV 1 UNION 2½" SG BS	77449-000246
NMV PP BALL VLV 1 UNION 3" FMT BSP	77449-000157	NMV PP BALL VLV 1 UNION 3" SG BS	77449-000247
NMV PP BALL VLV 1 UNION 4" FMT BSP	77449-000158	NMV PP BALL VLV 1 UNION 4" SG BS	77449-000248
NMV PP BALL VLV 1 UNION ¾" FMT NPT	77449-000171		
NMV PP BALL VLV 1 UNION 1" FMT NPT	77449-000172		
NMV PP BALL VLV 1 UNION 1¼" FMT NPT	77449-000173		
NMV PP BALL VLV 1 UNION 1½" FMT NPT	77449-000174		
NMV PP BALL VLV 1 UNION 2" FMT NPT	77449-000175		
NMV PP BALL VLV 1 UNION 2½" FMT NPT	77449-000176		
NMV PP BALL VLV 1 UNION 3" FMT NPT	77449-000177		
NMV PP BALL VLV 1 UNION 4" FMT NPT	77449-000178		



 **NETAFIM™**  
GROW MORE WITH LESS

# DUAL UNION BALL VALVES

Physical shut off, manual restrictions, control or service needs in irrigation head controls, field plots, nurseries, greenhouses, Nutrigation™ systems, water conveyance systems.



High Quality



Ultimate Durability



Durable & Reliable

## Benefits & Features

### → Saves operation costs

A quarter turn shut off valve, threaded or glued socket, user friendly design allowing smooth handle operation

Corrosion resistant and UV stabilized

The dual true union ball valve, specifically designed for water applications, for safe pipe line operation

### → Saves labor costs and multiple investments in maintenance

In the closed position, the pipeline can be disconnected downstream from the valve without any leakage

The valve is removable from the pipeline, allowing quick maintenance

Highly reliable operation and durable over time

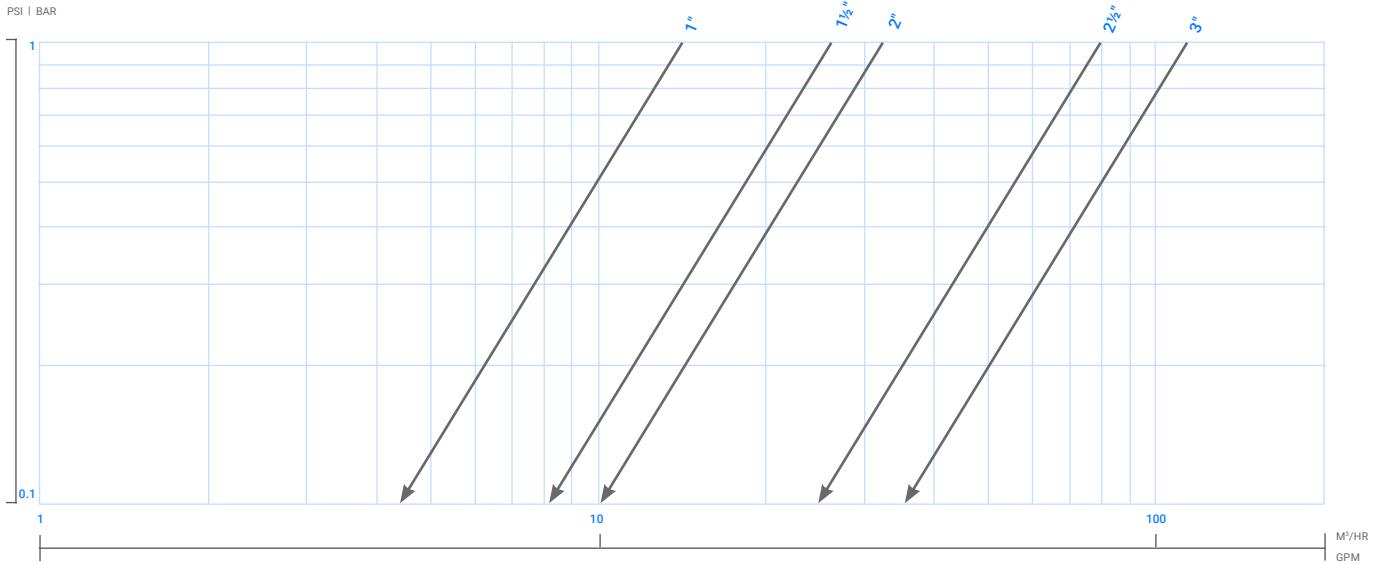
## Specifications & Recommendations

- Ideal for application in temperature range of -5°C and 50°C, guaranteeing optimal performance in terms of mechanical resistance, good rigidity, low coefficients of thermal expansion and optimal safety factors in service
- Operational up to 10 bar
- Low head losses
- Wide range of connections:  
Threaded (BSP or NPT standards) or SG, socket glued (ISO/DIN, ASTM, BS)

## → PACKAGING DATA

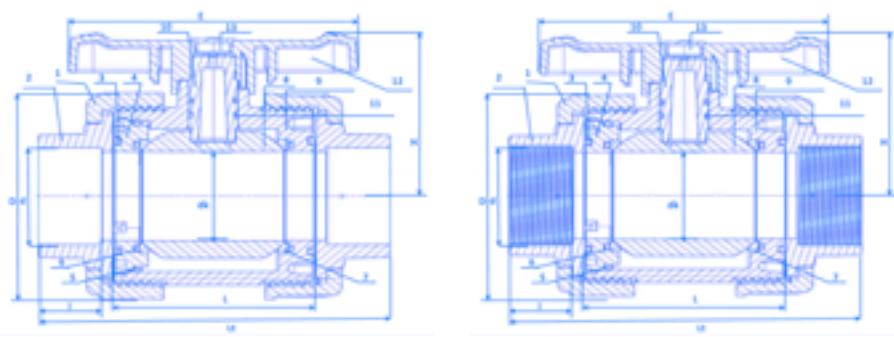
MODEL	QUANTITY P/BOX UNIT	BOX SIZES (CM X CM X CM)	FEMALE-FEMALE THD CONN. BOX WEIGHT (KG)	SOCKET GLUED CONN. BOX WEIGHT (KG)	BOXES P/PALLET
1" - 32 MM	75	43.0 X 33.0 X 39.0	21.98	21.49	
1½" - 50 MM	16	43.0 X 33.0 X 39.0	13.30	12.83	
2"- 63 MM	8	43.0 X 33.0 X 39.0	10.93	10.62	
2½" - 75 MM	8	43.0 X 33.0 X 44.5	14.84	14.60	
3"- 90 MM	4	43.0 X 33.0 X 39.0	15.69	15.55	12

## → HEAD LOSS



## → TECHNICAL DIMENSIONS

DUAL UNION BALL VALVES 1", 1½", 2", 2½", 3"



### Inlet connector - female threaded / Outlet connector - female threaded

nom size	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
1"	11.00	11.50	24.50	69.00	20.20	55.50	112.60	71.00	66.50
1½"	11.00	11.50	39.50	94.40	32.00	73.25	149.60	121.00	88.30
2"	11.00	11.50	49.50	116.00	35.40	84.20	177.40	150.00	97.00
2½"	11.00	8.00	59.00	131.60	45.50	100.00	212.10	162.00	107.50
3"	11.00	8.00	76.00	178.80	42.80	138.10	241.10	200.40	140.00

### Inlet connector - socket glued / Outlet connector - socket glued

nom size	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
32MM	32.00	32.00	24.50	69.00	20.20	55.50	110.00	71.00	66.50
50MM	50.00	50.00	39.50	94.40	32.00	73.25	149.60	121.00	88.30
63MM	63.00	63.00	49.50	116.00	35.40	84.20	177.40	150.00	97.00
75MM	75.00	75.00	59.00	131.60	45.50	100.00	212.10	162.00	107.50
90MM	90.00	90.00	76.00	178.80	42.80	138.10	241.10	200.40	140.00

### Inlet connector - socket glued / Outlet connector - socket glued

nom size	BSP (TPI)	NPT (TPI)	DK (MM)	D (MM)	I (MM)	L (MM)	LT (MM)	E (MM)	H (MM)
1"	33.40	34.00	24.50	69.00	20.20	55.50	110.00	71.00	66.50
1½"	48.26	48.00	39.50	94.40	32.00	73.25	149.60	121.00	88.30
2"	60.33	60.00	49.50	116.00	35.40	84.20	177.40	150.00	97.00
2½"	73.03	75.00	59.00	131.60	45.50	100.00	212.10	162.00	107.50
3"	88.90	89.00	76.00	178.80	42.80	138.10	241.10	200.40	140.00

## → MATERIALS

DUAL UNION BALL VALVES

1", 1½", 2", 2½", 3"

#	PART NAME	MATERIAL	QTY.
1	RING	UPVC	2
2	SOCKET	UPVC	2
3	BUSH SMALL O-RING	HNBR	2
4	BUSH	UPVC	1
5	BUSH BIG O-RING	HNBR	1
6	SEAL WASHER*	HNBR	2
7	SEAL	TPE	2
8	BALL	UPVC	1
9	BODY	UPVC	1
10	SHAFT	UPVC	1
11	SHAFT O-RING	HNBR	2**
12	HANDLE	ABS	1
13	HANDLE LOGO	ABS	1

\* Only in 3" valve

\*\* One in 2" valve

→ CATALOG NUMBERS

DESCRIPTION	CATALOG NUMBER
NMV PVC BALL VLV 2 UNION 1" FFT BSP	77451-000150
NMV PVC BALL VLV 2 UNION 1½" FFT BSP	77451-000152
NMV PVC BALL VLV 2 UNION 2" FFT BSP	77451-000153
NMV PVC BALL VLV 2 UNION 2½" FFT BSP	77451-000154
NMV PVC BALL VLV 2 UNION 3" FFT BSP	77451-000155
NMV PVC BALL VLV 2 UNION 32MM SG ISO/D	77451-000200
NMV PVC BALL VLV 2 UNION 50MM SG ISO/D	77451-000202
NMV PVC BALL VLV 2 UNION 63MM SG ISO/D	77451-000203
NMV PVC BALL VLV 2 UNION 75MM SG ISO/D	77451-000204
NMV PVC BALL VLV 2 UNION 90MM SG ISO/D	77451-000205
NMV PVC BALL VLV 2 UNION 1" FFT NPT	77451-000220
NMV PVC BALL VLV 2 UNION 1.1/2" FFT NPT	77451-000221
NMV PVC BALL VLV 2 UNION 2" FFT NPT	77451-000222
NMV PVC BALL VLV 2 UNION 2.1/2" FFT NPT	77451-000223
NMV PVC BALL VLV 2 UNION 3" FFT NPT	77451-000224
MV PVC BALL VLV 2 UNION 1" SG ASTM	77451-000250
NMV PVC BALL VLV 2 UNION 1½" SG ASTM	77451-000251
NMV PVC BALL VLV 2 UNION 2" SG ASTM	77451-000252
NMV PVC BALL VLV 2 UNION 2½" SG ASTM	77451-000253
NMV PVC BALL VLV 2 UNION 3" SG ASTM	77451-000254

# ANGLE SEAT "Y" VALVES

**Actuated piston valves. The piston actuator provides a linear motion to lift the seal off its seat.**



High Quality



Ultimate Durability



Durable & Reliable

## Benefits & Features

- ✓ The flow is minimally impeded in the open position, resulting in an excellent flow rate and a low-pressure loss
- ✓ Sturdy and solid design
- ✓ Multi turn liner motion throttling valve
- ✓ Engineering plastic raw material used for strength and durability
- ✓ Easy to open and clean when used in underground valve box
- ✓ Smooth movement using throttling wheel, makes the user operate the valve easily
- ✓ No leakage within operating pressure range, when valve completely shut off
- ✓ Direction of flow mentioned
- ✓ Can be installed in horizontal and vertical lines
- ✓ Does not cause water hammering when operated
- ✓ Has lesser turbulence during throttling
- ✓ Chemical / Corrosion Resistant & UV protected

## Specifications & Recommendations

- Operating pressure range up to 10 bars (PN10)
- High strength polypropylene
- 2" BSP or NPT male threaded
- Manual, hand operated
- Recommended flow up to 50 m³/h
- High quality nitrile seal

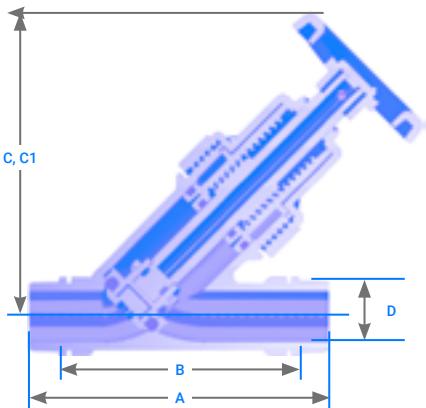
## → TECHNICAL DIMENSIONS

Inlet - threaded male // Outlet connector - threaded male

NOM SIZE	BSP (TPI)	NPT (TPI)	A (MM)	B (MM)	C* (MM)	C1** (MM)
2"	11.00	11.50	252.0	200.0	254.0	292.0

\* When valve is fully closed

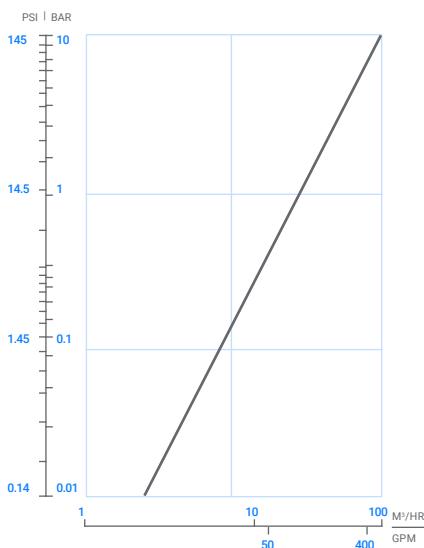
\*\* When valve is fully opened



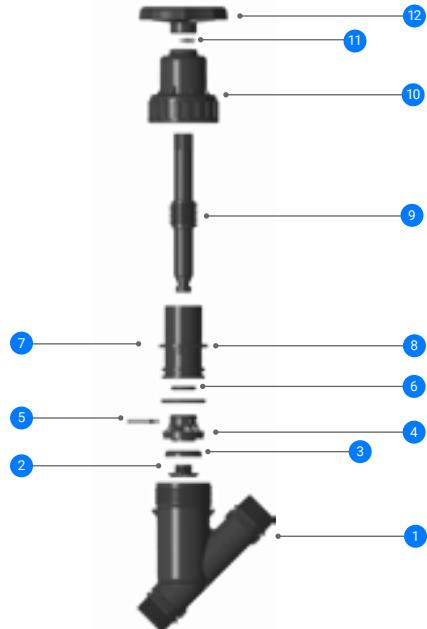
## → PACKAGING DATA

MODEL	QTY. P/BOX UNIT	BOX SIZES (CM X CM X CM)	BOX WEIGHT (KG)	BOXES P/PALLET
2"	2	39.5 X 36.5 X 14.5	2.8	63

## → HEAD LOSS



## → MATERIAL SPECIFICATIONS



## STANDARD VERSION

#	PART NAME	MATERIAL	QTY.
1	BODY	PP	1
2	SEAL CUP LOCK	PP	1
3	SEAL	NBR	1
4	SEAL CUP	PP	1
5	LOCK CLIP	PP	1
6	STEM HOUSING O-RING (OUTER)	NBR	1
7	STEM HOUSING O-RING (INNER)	NBR	1
8	STEM HOUSING	PP	1
9	SHAFT	PP	1
10	CAP	PP	1
11	LOCK PIN	PP	1
12	THROTTLE WHEEL (PURPLE COLOR)	PP	1

## → CATALOG NUMBERS

PRODUCT ILLUSTRATION	PRODUCT DESCRIPTION	CATALOG NUMBER
	NMV PP ANGLE SEAT "Y" 2" BSP	77457-000100
	NMV PP ANGLE SEAT "Y" 2" NPT	77457-000101
	NMV PP ANGLE SEAT "Y" 2" BSP VITON	77457-000102
	NMV PP ANGLE SEAT "Y" 2" NPT VITON	77457-000103

## "VITON" VERSION

#	PART NAME	MATERIAL	QTY.
1	BODY	PP	1
2	SEAL CUP LOCK	PP	1
3	SEAL	VITON	1
4	SEAL CUP	PP	1
5	LOCK CLIP	PP	1
6	STEM HOUSING O-RING (OUTER)	VITON	1
7	STEM HOUSING O-RING (INNER)	VITON	1
8	STEM HOUSING	PP	1
9	SHAFT	PP	1
10	CAP	PP	1
11	LOCK PIN	PP	1
12	THROTTLE WHEEL (PURPLE COLOR)	PP	1

PP = Polypropylene

# PVC BUTTERFLY VALVES

Physical shut off, manual restrictions, control or service needs in irrigation head controls, field plots, nurseries, greenhouses, water conveyance systems.



Resistant



Ultimate Durability



Easy Installation

## Benefits & Features

- Saves operation costs

A quarter turn shut off valve, user friendly design allowing smooth handle operation

Corrosion resistant and UV stabilized

Light weight and very easy to install between two flanges, at any position, saves labor costs and multiple investments in maintenance

Highly reliable operation and durable over time

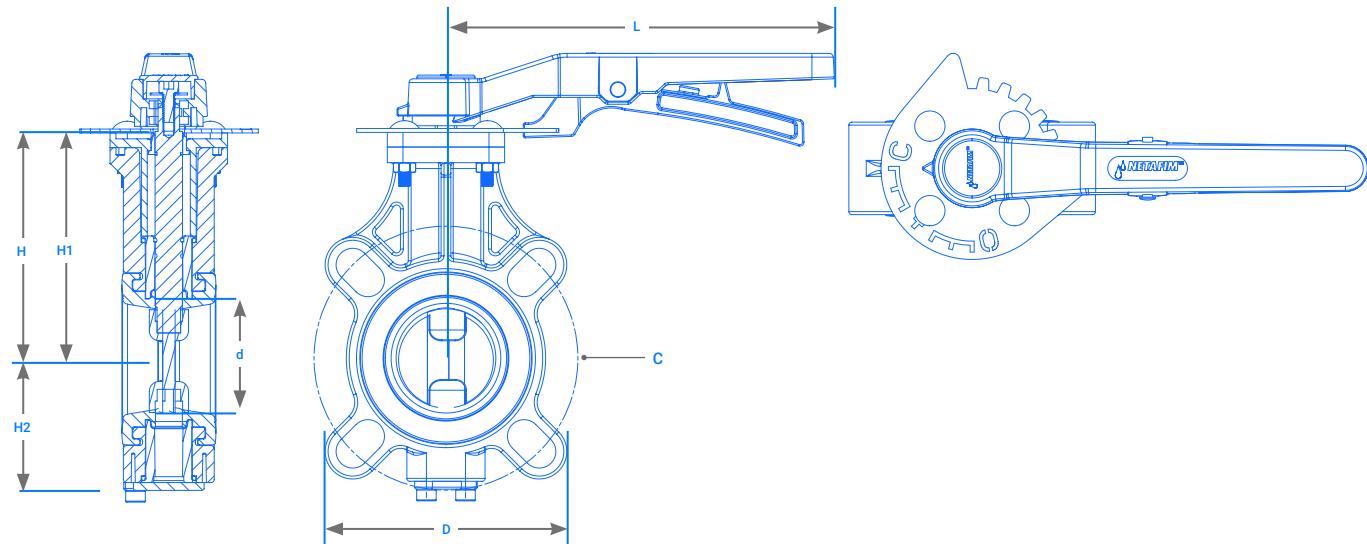
## Specifications & Recommendations

- For shutting off or manual regulating flow. Specifically designed for water and irrigation systems applications
- Ergonomic multifunctional handle enabling quick operation, with 15 degrees' adjustment graduations
- Drilling pattern with oval slots allowing coupling to flanges and complying with numerous international standards
- Can also be installed as an end line valve, bottom discharge valve or tank dump valve
- Operational up to 10 bar
- Low torque required to activate the valve under pressure, due to low-friction stem bushing
- PVC resins feature high value material strength and extremely long lifetime
- Low head losses
- One-piece body made of PVC-U
- Disc designed ensuring low torque and low head loss
- Suitable for piping in a limited space: 46 mm (models 2", 2½", 3") and 56 mm (model 4")

## → PACKAGING DATA

MODEL	QUANTITY P/BOX UNIT	BOX SIZES (CM X CM X CM)	BOX WEIGHT (KG)	BOXES P/PALLET
2"			2.98	
2½"	2	39.5 X 28.5 X 13.0	3.40	48
3"			3.73	
4"		40.0 X 37.5 X 13.5	5.79	30

## → TECHNICAL DIMENSIONS

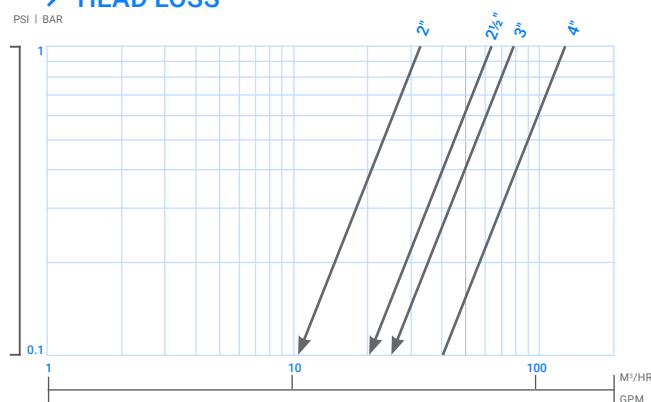


mod part	2"	2½"	3"	4"
d	50	65	80	100
D	117	112	128	162
H1	130	134	144	152
H2	71	88	91	106
H	165	174	182	197
L	198.5	198.5	198.5	279.0
C(POD)	120.8	137.5	155.5	183.0

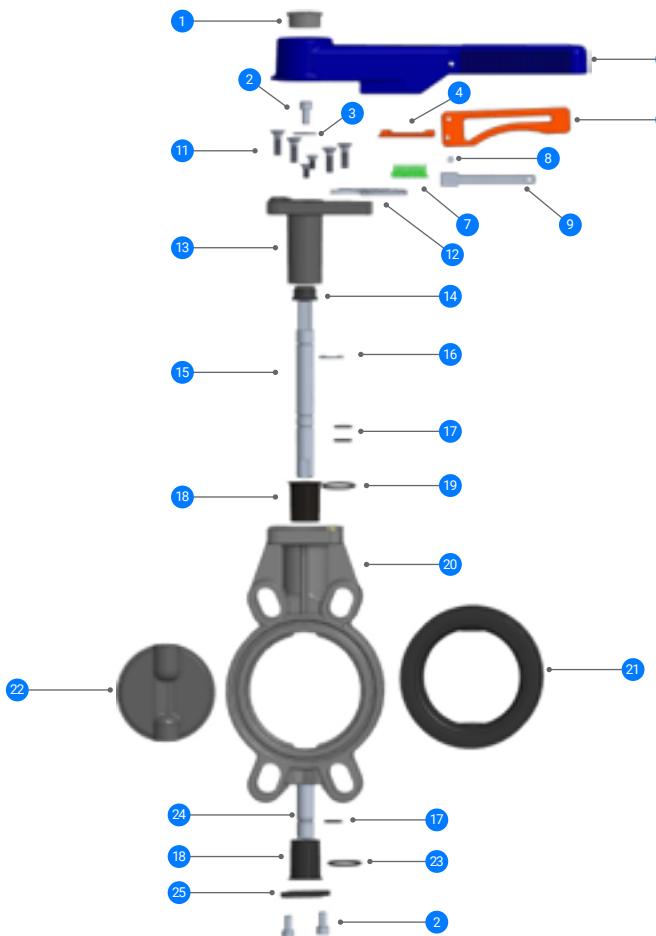
## → CATALOG NUMBERS

PRODUCT ILLUSTRATION	PRODUCT DESCRIPTION	CAT. NUMBER
	NMV PVC B.FLY VLV 2" 4 S BTW FLNG	77452-000100
	NMV PVC B.FLY VLV 2½" 4 S BTW FLNG	77452-000101
	NMV PVC B.FLY VLV 3" 4 S BTW FLNG	77452-000102
	NMV PVC B.FLY VLV 4" 4/8 S BTW FLNG	77452-000103

## → HEAD LOSS

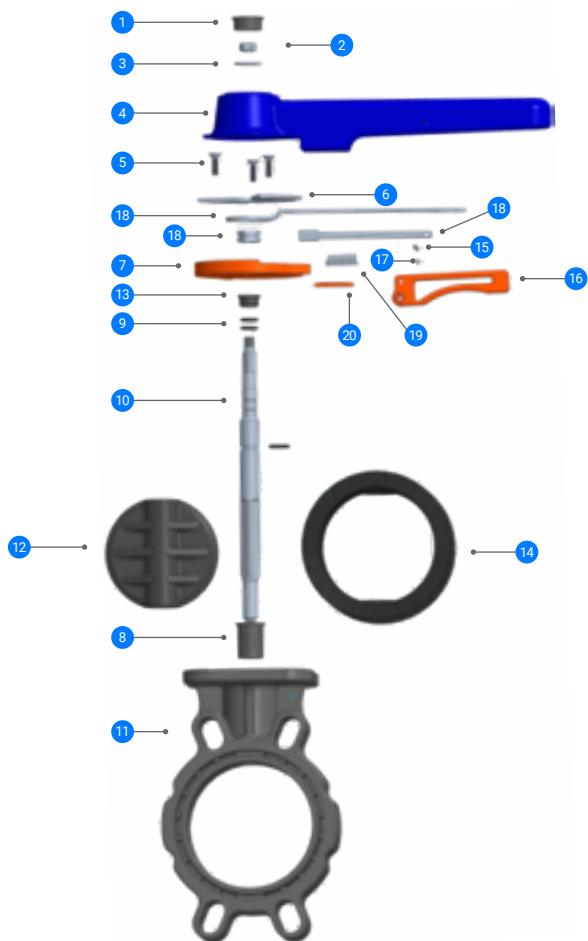


→ MATERIAL SPECIFICATION PVC BUTTERFLY VALVES 2", 2½", 3"

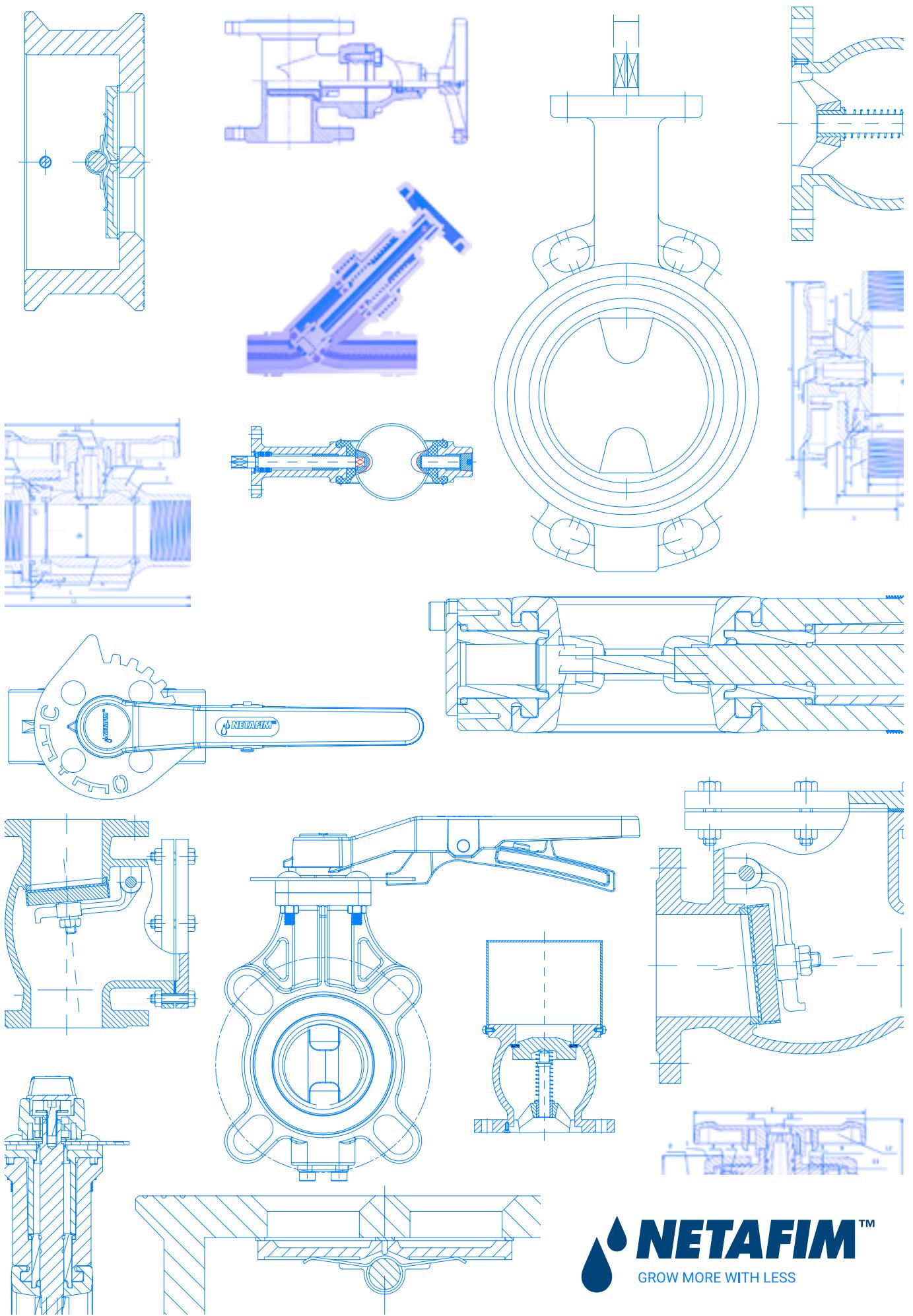


#	PART NAME	MATERIAL
1	LOGO CAP	ABS
2	ALLEN SCREW	SS304
3	HANDLE WASHER	SS304
4	HANDLE DOWEL	SS304/316
5	HANDLE	PPGF
6	LEVER	ABS
7	SPRING	SS304/316
8	LEVER PIN	SS304/316
9	LEVER PATTI	SS304/316
10	SPRING COVER	PPGF
11	CSK SCREW	SS304/316
12	CUTCH PLATE	SS304/316
13	SLEEVE	PVC
14	LOCKING BUSH	MOS2
15	BIG SHAFT	SS304/316
16	E-RING	SS304/316
17	SHAFT ORING	NBR
18	BIG BUSH	MOS2
19	BUSH ORING	NBR
20	BODY	PVC
21	SEAL	EPDM
22	DISC	SS304/316
23	BUSH ORING	NBR
24	SMALL SHAFT	SS304
25	BASE PLATE	POM

→ MATERIAL SPECIFICATION PVC BUTTERFLY VALVES 4"



#	PART NAME	MATERIAL
1	LOGO CAP	ABS
2	HEX BOLT	SS304
3	HANDLE WASHER	SS304
4	HANDLE	ABS
5	CSK BOLT	SS304/316
6	CLUTCH PLATE	SS304/316
7	HANDLE GUIDER	ABS
8	BIG BUSH	MOS2
9	SHAFT O-RING	NBR
10	SHAFT	SS304/316
11	BODY	PVC
12	DISC	PVC
13	LOCKING BUSH	MOS2
14	RUBBER SEAL	EPDM
15	HANDLE DOWEL	SS304/316
16	LEVER	ABS
17	LEVER DOWEL	SS304/316
18	LEVER PATTI	SS304/316
19	SPRING	SS304/316
20	SPRING LOCK PLATE	ABS



 **NETAFIM™**  
GROW MORE WITH LESS

# THROTTLE VALVES

Manual restrictions in irrigation head controls, field plots, Nutrigation™ systems, filtration heads systems.



Accurate



Resistant



Ultimate Durability

## Benefits & Features

- Saves operation costs User friendly design allows smooth handle operation
- Saves labor costs and multiple investments in maintenance Highly reliable operation and durable over time  
Chemical/corrosion resistant, UV stabilized

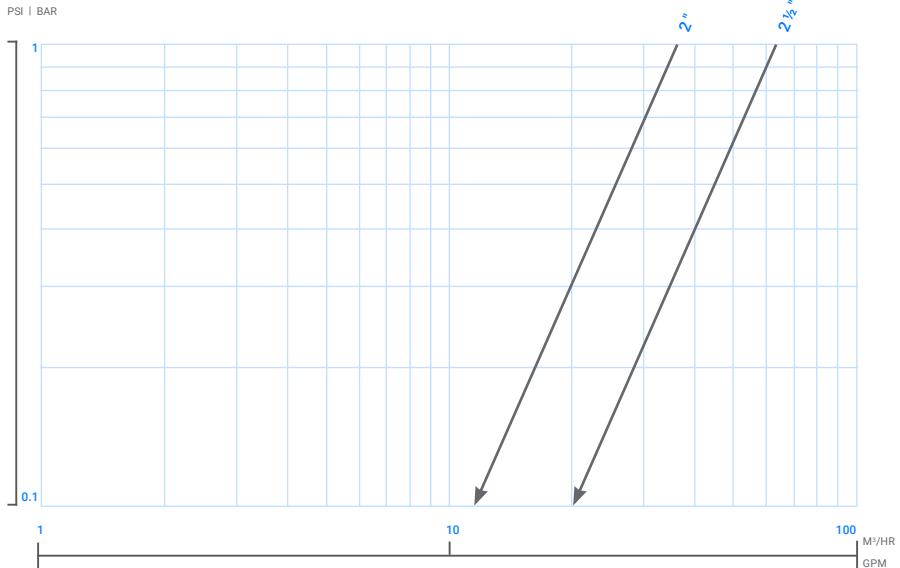
## Specifications & Recommendations

- Multi turn, vertical motion
- Straight through flow with minimal head loss
- Visual float position indicator to show % throttle of piping system
- Slow operation prevent water hammer
- Maintaining seat leakage permissible limit as per Standard ANSI/FCI-70-2-2006 in class III (0.10%)
- Operational up to 6 bar
- Threaded connections (BSP or NPT standards)

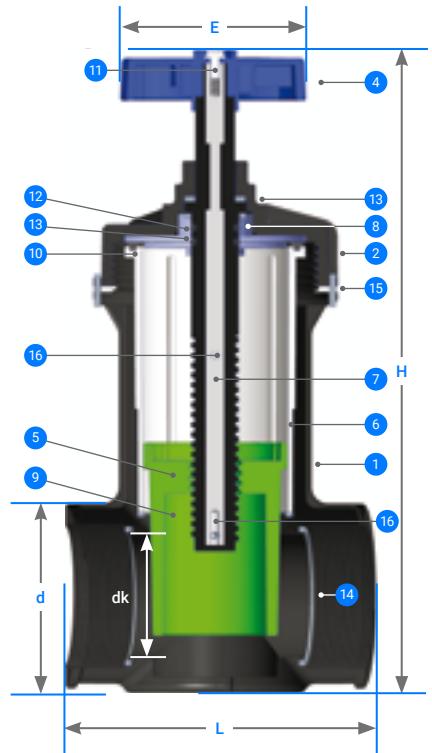
## → PACKAGING DATA

MODEL	QUANTITY P/BOX UNIT	BOX SIZES (CM X CM X CM)	BOX WEIGHT (KG)	BOXES P/PALLET
2"		69.0 X 19.5 X 30.0	6.85	15
2½"	5	78.5 X 23.0 X 41.5	14.67	8
3"			13.82	

## → HEAD LOSS



## → MATERIAL SPECIFICATION



## → TECHNICAL DIMENSIONS

### Inlet connector - female threaded / Outlet connector - female threaded

nom size	BSP (TPI)	NPT (TPI)	D (MM)	DK (MM)	E (MM)	L (MM)	H (MM)
2"	11.00	11.50	65.00	48.00	117.00	130.00	275.00
2½"	11.00	8.00	74.00	63.00	117.00	182.00	390.00
3"	11.00	8.00	93.00	74.00	117.00	182.00	390.00

## → CATALOG NUMBERS

PRODUCT ILLUSTRATION	PRODUCT DESCRIPTION	CATALOG NUMBER
	NMV PP THROTTLE VLV 2" FFT BSP	77453-000200
	NMV PP THROTTLE VLV 2½" FFT BSP	77453-000201
	NMV PP THROTTLE VLV 3" FFT BSP	77453-000202

\* Can be also ordered in NPT standard if required

#	PART NAME	MATERIAL	QTY.
1	BODY	REINFORCED PP	1
2	FLANGE	REINFORCED PA	1
3	DISC	REINFORCED PA	1
4	HANDLE	REINFORCED PA	1
5	CYLINDER	REINFORCED PP	1
6	PC HOUSING	PP	1
7	SHAFT	REINFORCED PA+MS	1
8	SHAFT O-RING	HNBR	2
9	BOTTOM GASKET	HNBR	1
10	SLEEVE GASKET	HNBR	1
11	HANDLE SCREW	SS-304	1
12	TEFLON SEAL BIG	TEFLON	1
13	TEFLON SEAL SMALL	TEFLON	1
14	HOUSING GASKET	HNBR	2
15	LOCKING PIN	SS-304	2
16	DOWEL PIN (4*30) SS	SS-304	2

# PVC SWING WAFER CHECK VALVES

In-line non return valve to stop fluids flowing back through the system.



Reliable



Resistant



Ultimate Durability

## Benefits & Features

→ Saves operation costs

The check valve is designed for free flow of water without interference and with minimal head loss

Made from PVC-U corrosive-resistant composite materials

→ Saves labor costs and multiple investments in maintenance

The valve is made from composite materials to withstand highly abrasive conditions and to ensure long-term service also in corrosive liquid environments

The valve connects between flanges and is supplied with seals for flange to flange installation

Light weight

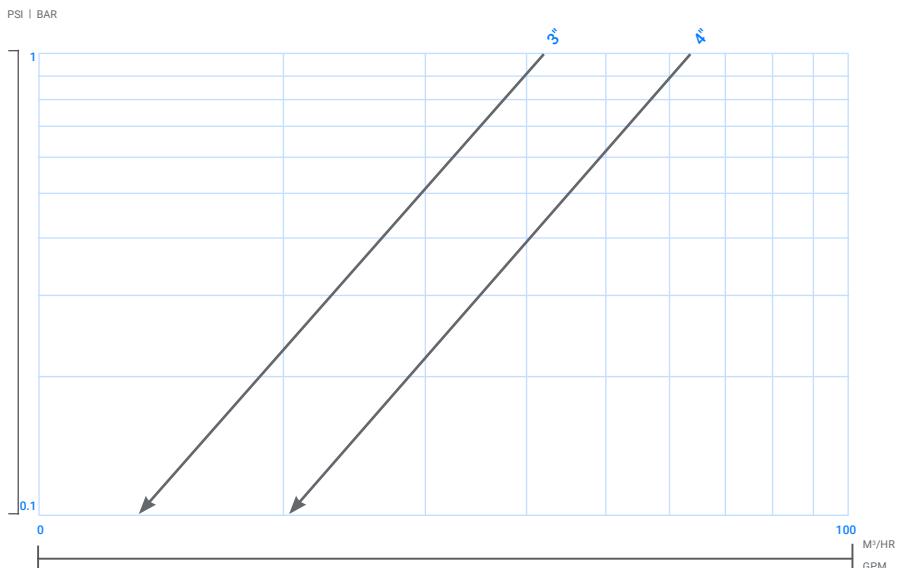
## Specifications & Recommendations

- Straight through flow with minimal head loss
- Slow operation prevent water hammer
- Operational up to 6 bar
- Minimum return pressure: 0.2 bar (to keep the valve closed)

## → PACKAGING DATA

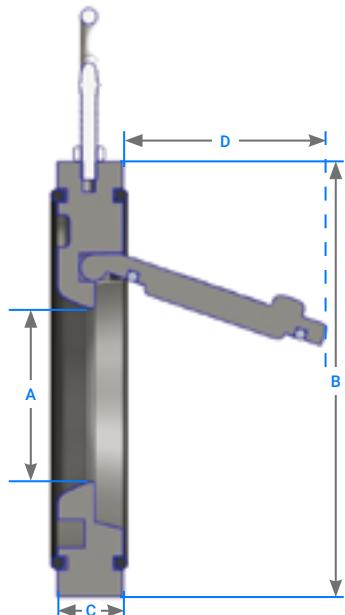
MODEL	QUANTITY P/BOX UNIT	BOX SIZES (CM X CM X CM)	BOX WEIGHT (KG)	BOXES P/PALLET
3"	40	30.0 X 30.0 X 31.5	17.2	27
4"	20	34.0 X 34.0 X 18.0	11.5	458

## → HEAD LOSS



## → MATERIAL SPECIFICATION

#	PART NAME	MATERIAL	QTY.
1	BODY	PVC-U	1
2	FLAP	PVC-U	1
3	CAP	PVC-U	2
4	BODY O-RING	EPDM	2
5	FLAP O-RING	EPDM	1
6	H SCREW	PLATED MS	1



## → TECHNICAL DIMENSIONS

nom size	A (MM)	B (MM)	C (MM)	D (MM)
3"	54.3	129.0	21.0	68.0
4"	64.0	159.0	25.0	78.0

## → CATALOG NUMBERS

PRODUCT ILLUSTRATION	PRODUCT DESCRIPTION	CATALOG NUMBER
	NMV PVC S.CHECK VLV 3" BTW 2 FLNG	77454-000200
	NMV PVC S.CHECK VLV 4" BTW 2 FLNG	77454-000201

# BALL CHECK VALVES

In-line non return valve to stop fluids flowing back through the system.  
As a foot valve at a pump inlet.



Reliable



Resistant



Ultimate Durability

## Benefits & Features

- Saves operation costs  
The check valve is designed for free flow of water with minimal head loss
- Made from PP corrosive-resistant composite materials
- Saves labor costs and multiple investments in maintenance  
The valve is made from composite materials to withstand highly abrasive conditions and to ensure long-term service also in corrosive liquid environments
- Light weight

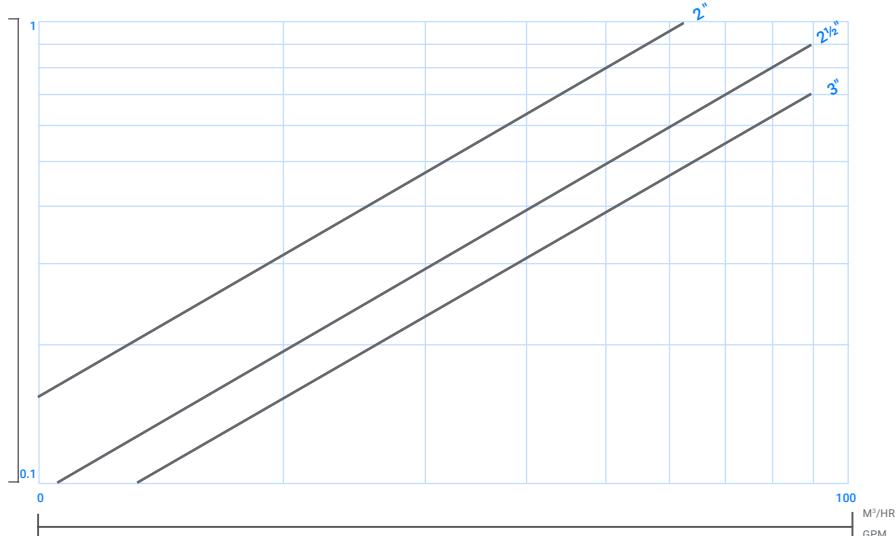
## Specifications & Recommendations

- Spring loaded ball check valve
- Flow with minimal head loss
- Slow operation prevent water hammer
- Operational up to 6 bar
- Minimum return pressure: 0.1 bar (to keep the valve closed)
- Horizontal or vertical installation
- Universal flanges, fits ISO, ANSI, BS10 standards

## → PACKAGING DATA

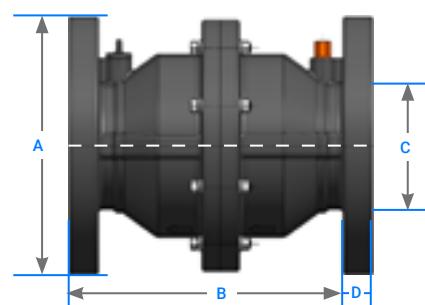
MODEL	QUANTITY P/BOX UNIT	BOX SIZES (CM X CM X CM)	BOX WEIGHT (KG)	BOXES P/PALLET
2"	8	62.0 X 31.5 X 18.0	8.9	15
2½"	4	43.6 X 43.6 X 26.0	8.2	16
3"			9.1	

## → HEAD LOSS



## → MATERIAL SPECIFICATION

#	PART NAME	MATERIAL	QTY.
1	BODY (INLET)	PPGF	1
2	BODY (OUTLET)	PPGF	1
3	BODY O-RING	NBR	1
4	BALL	ABS	1
5	BALL SEAL	NBR	1
6	NUT	SS	8
7	BOLT	SS	8
8	WASHER	SS	16
9	VACCUUM BREAKER	BRASS	1
10	PLUG	PPGF	1
11	SPRING	SS	1

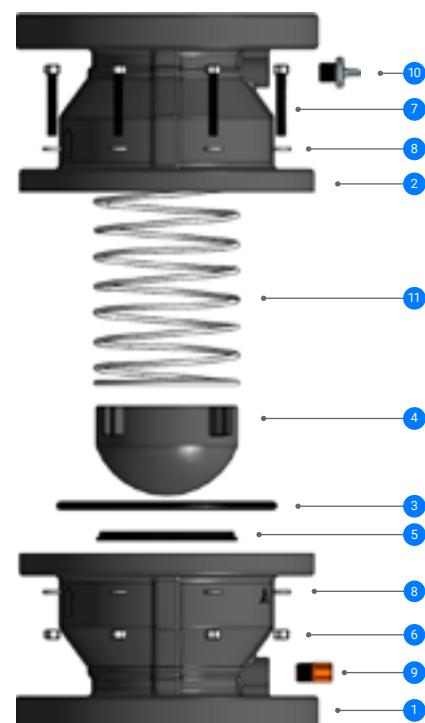


## → TECHNICAL DIMENSIONS

nom size	NOMINAL DIAMETER (MM)	A (MM)	B (MM)	C (MM)	D (MM)
2"	50	150	164	50	18.5
2½"	65	188	235	65	20.5
3"	80	205	237	82	24.0

## → CATALOG NUMBERS

PRODUCT ILLUSTRATION	PRODUCT DESCRIPTION	CATALOG NUMBER
	NMV PP BALL CHECK VALVE 2"	77454-000200
	NMV PP BALL CHECK VALVE 2½"	77454-000221
	NMV PP BALL CHECK VALVE 3"	77454-000222



# BRASS 3-WAY BALL VALVES

3-way brass ball valve for hydraulic flow control.  
Automatic and computerized irrigation systems  
for agriculture and landscape gardening.  
Filtering, industrial, domestic water supply  
systems.



Reliable



Resistant



Ultimate  
Durability

## Benefits & Features

- ✓ The valves have a common port at the base of the valve body. Any of the three peripheral ports can be connected to the common port – the other ports are totally sealed
- ✓ Designed for three hydraulic control positions: Open, Closed, and Automatic
- ✓ Valves are sealed when handle position is between port position
- ✓ User friendly design allows smooth operation of handle with position indicator
- ✓ Easy viewing of the operating position

## Specifications & Recommendations

- Common port at base of the valve body
- Base port thread: Male threaded ¼" BSP or NPT
- Three threaded ports: Female threaded ½" BSP or NPT or ¼" BSP or NPT
- Passage size: 3.5 mm
- Maximum working pressure: 10 Bar
- One moving part only

## → PACKAGING DATA

MODEL	QTY. P/BOX UNIT	BOX SIZES (CM X CM X CM)	BOX WEIGHT (KG)	BOXES P/PALLET
1/4" MTH - 3 X 1/8" FTH	100	41.0 X 26.5 X 12.0	14.4	64
1/4" MTH - 3 X 1/4" FTH	40	26.7 X 19.5 X 13.5	9.7	120

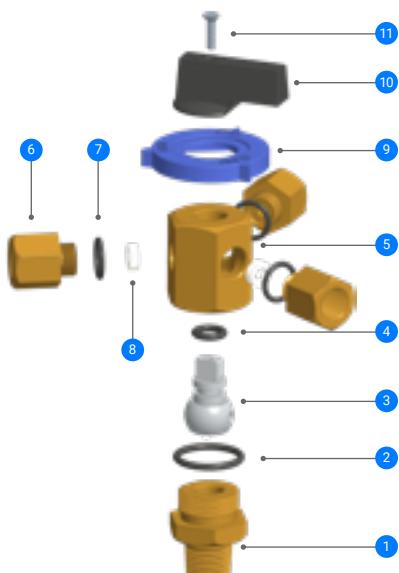
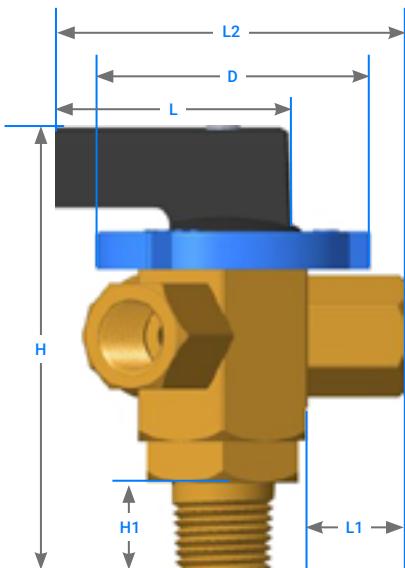
## → CATALOG NUMBERS

PRODUCT ILLUSTRATION	PRODUCT DESCRIPTION	CATALOG NUMBER
	NMV BR BALL VLV 3W 1/4" MTH 1/8" FTH BSP	77455-000200
	NMV BR BALL VLV 3W 1/4" MTH 1/8" FTH NPT	77455 000201
	NMV BR BALL VLV 3W 1/4" MTH 1/4" FTH BSP	77455 000202
	NMV BR BALL VLV 3W 1/4" MTH 1/4" FTH NPT	77455 000203

## → MATERIAL SPECIFICATION

#	PART NAME	MATERIAL	QTY.
1	BASE	BRASS	1
2	BASE O-RING	EPDM	1
3	BALL	NICKEL PLATED BRASS	1
4	BALL O-RING	EPDM	1
5	BODY	BRASS	1
6	NOZZLE	BRASS	3
7	NOZZLE O RING	EPDM	3
8	SEAL	TEFLON (PTFE)	3
9	BODY COVER	ABS	1
10	HANDLE	ABS	1
11	SCREW	STAINLESS STEEL	1

## → TECHNICAL DIMENSIONS



size	nom	D (MM)	L (MM)	L1 (MM)	L2 (MM)	H (MM)	H1 (MM)
1/4" MTH - 3 X 1/8" FTH		33.0	43.5	13.0	58.0	53.2	12.0
1/4" MTH - 3 X 1/4" FTH		42.3	49.0	13.6	67.6	73.2	12.0

# WAFER CONNECTION BUTTERFLY METAL VALVES

Simple, light and reliable for installation wherever there is a need to cut the flow passage in pipes and equipment.



Resilient



Robust



Resistant

## Benefits & Features

### → Outstanding performance

Netafim manual valves are manufactured using materials of the highest quality, always complying with the standards for hydraulically operated devices

### → Ultimated durability

The quality of the Netafim butterfly valve gives it great resistance over time. The replaceable seat guarantees bidirectional watertightness, easy maintenance due to its innovative design and longer life of the valve

### → Extremely versatile

Different disc material options: ductile iron, stainless steel or aluminum bronze

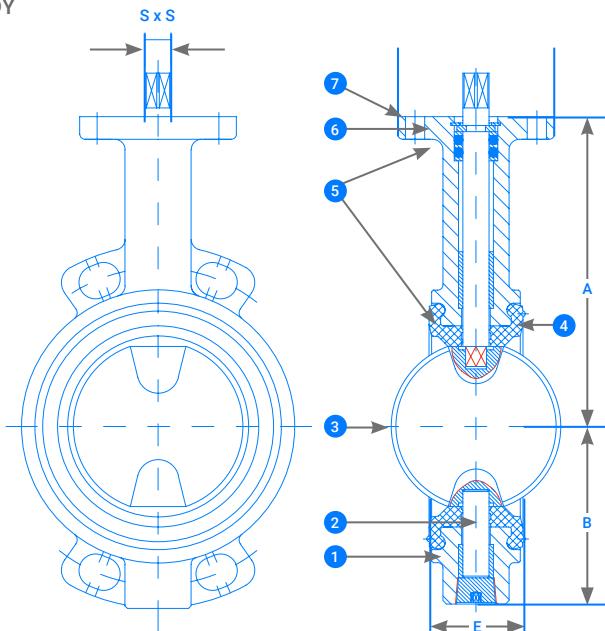
## → TECHNICAL SPECIFICATIONS

TYPE	CONCENTRIC
PRESSURE GRADE	PN16
AVAILABLE DIAMETERS	DN50 TO DN600
WORKING TEMPERATURE	-10°C TO 120°C FOR EPDM
CONNECTION	WAFER
COATING	250 MM EPOXY RESIN RAL5010
SEAT	REPLACEABLE WITH 3 ATTACHMENT POINTS
DISK-SHAFT CONNECTION	MECHANIZED INTERNALLY (WITHOUT PINS)

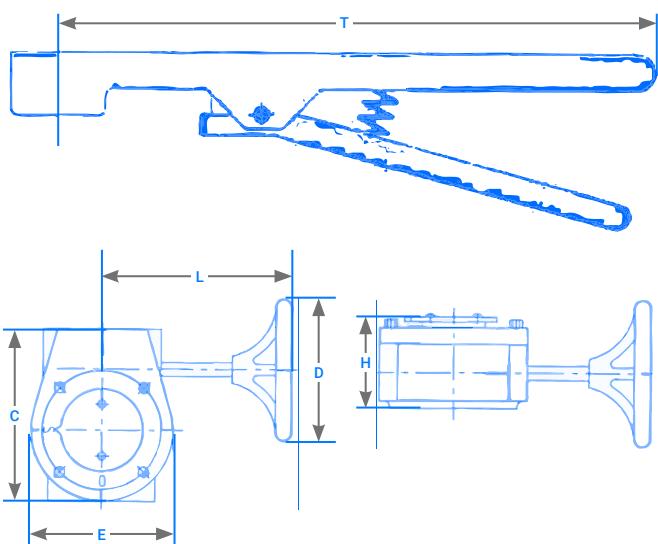
\* Other materials and specifications on request.

## → TECHNICAL DIMENSIONS

BODY



ACTUATORS



DN	BODY DIMENSIONS (MM)				
	A	B	D	E	SxS
50	161	80	90	43	
65	175	91	90	45	11 X 11
80	181	95	90	46	
100	200	115	90	51.5	14 X 14

DN	ACTUATOR DIMENSIONS (MM)					
	T	L	H	D	E	C
50-150	236	160	65	195	108	130
200-250	326	238	85	297	153	177
300-350	415	226	95	297	161	198
400-350	-	266	121	388	252	281
500-600	-	241	118	388	264	303

## → MATERIAL SPECIFICATION

BODY

#	BODY COMPONENT	MATERIAL	SPECIFICATION
1	BODY	DUCTILE IRON	ASTM A536 60-40-1,8 (GGG40)
2	SHAFT	STAINLESS STEEL	AISI 420
3	DISC	STAINLESS STEEL	AISI 420
4	SEAT	EPDM	EN681
5	BEARING	PFTF	COMMERCIAL
6	RING SEAL	EPDM	EN681
7	INDICATOR PLATE	STAINLESS STEEL	AISI 420

ACTUATORS

#	BODY COMPONENT	MATERIAL	SPECIFICATION
1	BODY AND CAP	DUCTILE IRON	A126 (GG25)
2	ENDLESS SCREW	STAINLESS STEEL	AISI 420
3	GEAR	DUCTILE IRON	A536 (GGG50)
4	HAND-WHEEL	DUCTILE IRON	A126 (GG25)
5	SHAFT	STAINLESS STEEL	AISI 420

## → CATALOG NUMBERS

DESCRIPTION	CAT. NUMBER
GAER BUTTERFLY VALVE 3" GEAR OPERATED	71660-000940
GAER BUTTERFLY VALVE 4" GEAR OPERATED	71660-000941
GAER BUTTERFLY VALVE 6" GEAR OPERATED	71660-000942
GAER BUTTERFLY VALVE 8" GEAR OPERATED	71660-000943
GAER BUTTERFLY VALVE 10" GEAR OPERATED	71660-000944
GAER BUTTERFLY VALVE 12" GEAR OPERATED	71660-000945

DESCRIPTION	CAT. NUMBER
GAER BUTTERFLY VALVE 3" LEVER OPERATED	71660-000950
GAER BUTTERFLY VALVE 4" LEVER OPERATED	71660-000951
GAER BUTTERFLY VALVE 6" LEVER OPERATED	71660-000952
GAER BUTTERFLY VALVE 8" LEVER OPERATED	71660-000953
GAER BUTTERFLY VALVE 10" LEVER OPERATED	71660-000954

\* Additional diameters, materials and specifications are available upon request

# RESILIENT SEAT METAL GATE VALVES

Designed for use in distribution of fluids such as water, and neutral fluids in a wide range of temperatures and working conditions.



WHEEL  
TYPE

SQUARE KEY  
TYPE

EXTENSION SHAFT  
FOR SQUARE KEY TYPE



Resilient



Robust



Durable

## Benefits & Features

### → Outstanding performance

The pitch diameter of this type of valve is equal to the nominal diameter when the valve is in totally open position. In this way minimum load losses are obtained

### → Ultimated durability

Its configuration guarantees complete and directional tightness in its entire range of pressures, with smoothmovement of the shaft during its entire travel

### → Extremely versatile

Resilient seat, operated by handwheel, square cap or extendable shaft according to the application

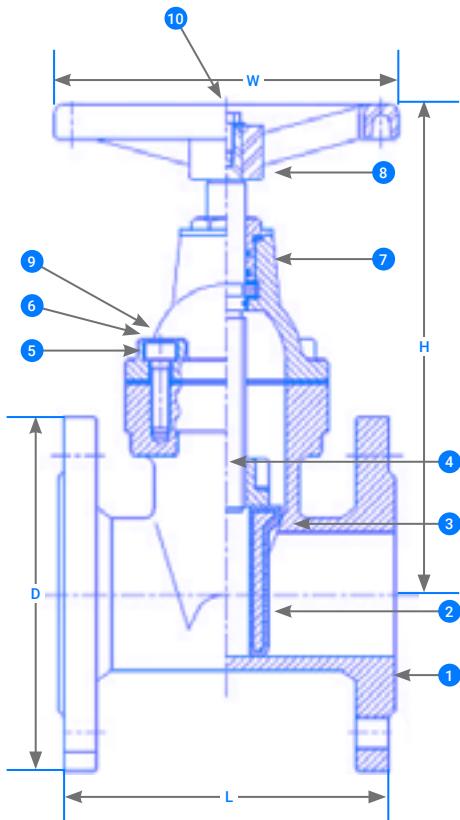
## → TECHNICAL SPECIFICATIONS

PRESSURE GRADE	PN16
AVAILABLE DIAMETERS	DN50 TO DN600
WORKING TEMPERATURE	-10°C TO 120°C FOR EPDM
CONNECTION	FLANGE
COATING	250 MM EPOXY RESIN RAL5010

\* Other materials and specifications on request.

## → TECHNICAL DIMENSIONS

DN	D	DIMENSIONS (MM)			
		L		W	H
		NARROW	WIDE		
50	165	150	250	180	230
65	185	170	270	180	265
80	200	180	280	220	265
100	220	190	300	220	310



## → MATERIAL SPECIFICATION

#	COMPONENT	MATERIAL	SPECIFICATION
1	BODY	DUCTILE IRON	ASTM A536 80-55-06 (GGG50)
2	GATE	DUCTILE IRON+EPDM	ASTM A536 80-55-06 (GGG50)
3	GATE LOCK NUT	BRASS	ASTM B16 C36000
4	SHAFT	STAINLESS STEEL	AISI 420
5	CAP	DUCTILE IRON	ASTM A536 80-55-06 (GGG50)
6	LOCK NUT	BRASS	ASTM B16 C36000
7	WASHER	STAINLESS STEEL	AISI 304
8	SEAL	NBR	EN681
9	SCREWS	STAINLESS STEEL	AISI 304
10	HANDWHEEL	DUCTILE IRON	ASTM A536 80-55-06 (GGG50)

## → CATALOG NUMBERS

DESCRIPTION	OPERATION	CONNECTION TYPE		
		ISO	BSTD	ANSI
2"	WHEEL	71660-000870	71660-000871	71660-000872
	SQUARE KEY **	71660-000873	71660-000874	71660-000875
3"	WHEEL	71660-000880	71660-000881	71660-000882
	SQUARE KEY **	71660-000883	71660-000884	71660-000885
4"	WHEEL	71660-000890	71660-000891	71660-000892
	SQUARE KEY **	71660-000893	71660-000894	71660-000895
6"	WHEEL	71660-000900	71660-000901	71660-000902
	SQUARE KEY **	71660-000903	71660-000904	71660-000905
8"	WHEEL	71660-000910	71660-000911	71660-000912
	SQUARE KEY **	71660-000913	71660-000914	71660-000915
10"	WHEEL	71660-000920	71660-000921	71660-000922
	SQUARE KEY **	71660-000923	71660-000924	71660-000925
12"	WHEEL	71660-000930	71660-000931	71660-000932
	SQUARE KEY **	71660-000933	71660-000934	71660-000935

\* Additional diameters, materials and specifications available upon request

\*\* Extension shaft is supplied for any square key gate valve

# METAL CHECK VALVES

Designed for use in distribution of fluids such as water, and neutral fluids in a wide range of temperatures and working conditions.



Reliable



Resilient



Durable

## Benefits & Features

### → Double Flap Check Valve

The discs are opened by the pressure of the circulating fluid, and let the fluid pass in the required direction. When the flow is stopped, the valve shuts off rapidly thanks to a closing spring, thus preventing reverse flow

### → Swing Check Valve

Suited for work with wastewater, dirty water or water with high concentrations of suspended solids. Its shutoff system is free of possible obstructions and requires minimum pressure both for opening and closing

### → Foot Check Valve

The ideal solution to prevent emptying of the suction lines in pumps. Its design and manufacture guarantee hermetic closing. The stainless steel strainer prevents entry of solid particles into the pipe

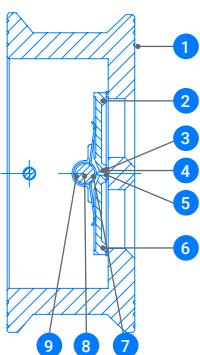
## → TECHNICAL SPECIFICATIONS

PRESSURE GRADE	PN16
AVAILABLE DIAMETERS	DN50 TO DN600
WORKING TEMPERATURE	-10°C TO 120°C FOR EPDM
MIN. CLOSING PRESSURE	1 BAR (FOR DOUBLE FLAP & SWING), 0.3 BAR (FOR FOOT)
COATING	250 MM EPOXY RESIN RAL5010

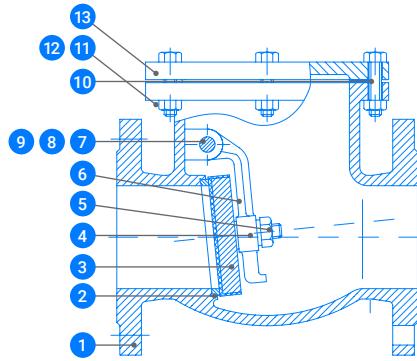
\* Other materials and specifications on request.

## → MATERIAL SPECIFICATION

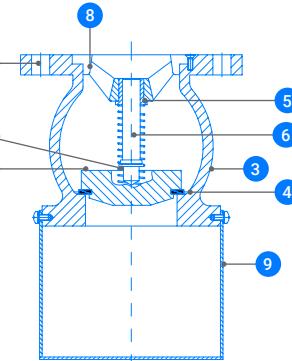
DOUBLE FLAP



SWING



FOOT



#	COMP.	MATERIAL	SPECS.
1	BODY	GRAY CAST IRON	ASTM A126 KEY B (GG25)
2	DISK	STAINLESS STEEL	ASTM A351 CF8M (AISI 316)
3	SEAT	EPDM	EN 681
4	SPRING	STAINLESS STEEL	AISI 304
5	WASHER	PTFE	COMMERCIAL
6	SEAL	EPDM	EN 681
7	HINGE PIN	STAINLESS STEEL	AISI 420
8	STOP PIN	STAINLESS STEEL	AISI 420
9	LOCKING PIN	STAINLESS STEEL	AISI 304

#	COMP.	MATERIAL	SPECS.
1	BODY	DUCTILE IRON	ASTM A536
2	SEAT	BRASS	ASTM B16
3	DISC	DUCTILE IRON + NBR	ASTM A536 +NBR
4	WASHER	CARBON STEEL	ASTM A3
5	LOCK NUT	CARBON STEEL	ASTM A3
6	LEVER	DUCTILE IRON	ASTM A536
7	HINGE PIN	STAINLESS STEEL	AISI 420
8	PIN	CARBON STEEL	ASTM A3
9	SEAL	NYL	-
10	SEAL	NBR	-
11	SCREW	CARBON STEEL	ASTM A3
12	LOCK NUT	CARBON STEEL	ASTM A3
13	CAP	DUCTILE IRON	ASTM A536

#	COMP.	MATERIAL	SPECS.
1	BODY	GRAY CAST IRON	ASTM A126 CLASS B (GG25)
2	BALL	GRAY CAST IRON	ASTM A126 CLASS B (GG25)
3	SEAT	GRAY CAST IRON	ASTM A126 CLASS B (GG25)
4	SEALING GASKET	EPDM	COMMERCIAL
5	BEARING	BRONZE	ASTM B62 C83600
6	SHAFT	STAINLESS STEEL	AISI 420
7	SPRING	STAINLESS STEEL	AISI 304
8	SUPPORT	GRAY CAST IRON	ASTM A126 CLASS B (GG25)
9	MESH FILTER	STAINLESS STEEL	AISI 304

## → CATALOG NUMBERS

DESCRIPTION	CONNECTION TYPE		
	ISO	ANSI	WAFER
CHECK VALVE 2" DOUBLE FLAP	-	-	71660-000800
CHECK VALVE 2" SWING	71660-000801	71660-000802	-
CHECK VALVE 2" FOOT	71660-000803	71660-000804	-
CHECK VALVE 3" DOUBLE FLAP	-	-	71660-000810
CHECK VALVE 3" SWING	71660-000811	71660-000812	-
CHECK VALVE 3" FOOT	71660-000813	71660-000814	-
CHECK VALVE 4" DOUBLE FLAP	-	-	71660-000820
CHECK VALVE 4" SWING	71660-000821	71660-000822	-
CHECK VALVE 4" FOOT	71660-000823	71660-000824	-
CHECK VALVE 6" DOUBLE FLAP	-	-	71660-000830
CHECK VALVE 6" SWING	71660-000831	71660-000832	-
CHECK VALVE 6" FOOT	71660-000833	71660-000834	-

DESCRIPTION	CONNECTION TYPE		
	ISO	ANSI	WAFER
CHECK VALVE 8" DOUBLE FLAP	-	-	71660-000840
CHECK VALVE 8" SWING	71660-000841	71660-000842	
CHECK VALVE 8" FOOT	71660-000843	71660-000844	
CHECK VALVE 10" DOUBLE FLAP			71660-000850
CHECK VALVE 10" SWING	71660-000851	71660-000852	
CHECK VALVE 10" FOOT	71660-000853	71660-000854	
CHECK VALVE 12" DOUBLE FLAP			71660-000860
CHECK VALVE 12" SWING	71660-000861	71660-000862	
CHECK VALVE 12" FOOT	71660-000863	71660-000864	

\* Additional diameters, materials and specifications are available upon request

