# 75 Series <sup>3</sup>⁄<sub>4</sub>" - 4"R

The strong and versatile Polypropylene valves of the 75 Series exhibit exceptional hydraulic characteristics and provide optimal control of leaching systems.





durability

# **Benefits & Features**

- Engineered with durability in mind, enabling repeated installations and extended use. Supports Long-lasting  $\rightarrow$ long-term performance and reliability. performance
  - High durability Offers superior resistance to chemicals and acids, minimizing maintenance costs. Components are crafted from materials designed to withstand high acid concentrations found in mines.
- Versatility
- Includes a full selection of control functions and end connections. Ensures compatibility and seamless integration.

# **Specifications**

- Maximum pressure 10 bar (145 psi).
- Minimum recommended flow  $- 1 \text{ m}^3/\text{h} (5 \text{ gpm})$ .
- Minimum operating pressure 0.4 bar (6 psi)\*.
- Maximum operating temperature 60°C (140°F).

\* Available with low pressure diaphragm





## $\rightarrow$ Hydraulic performance

Diameter	inch	3⁄4	1	1½	2	2½	3R	3	4R
	mm	20	25	35	50	65	80	80	100
Flow rate factor**	Kv (metric)	12	16	60	83	85	90	120	120
	Cv (US)	14	20	70	96	98	104	140	140

\*\* 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>

## $\rightarrow$ Technical dimensions

Diameter		inch	3⁄4	1	1½	2	21/2	3R	3	3*	4R*
		mm	20	25	40	50	65	80	80	80	100
Height	H1		38 / 11/2	38 / 11/2	67 / 25/8	67 / 25/8	67 / 25/8	67 / 25/8	100 / 315/16	100 / 315/16	100 / 315/16
	H2	mm / inch	100 / 4	100 / 4	112 / 43/8	112 / 43/8	112 / 43/8	112 / 43/8	180 / 7 <sup>1</sup> /8	180 / 7¹/8	180 / 7¹/8
	R		18 / 11/16	22 / <sup>13/</sup> 16	30 / 1³/16	37 / 11/2	47 / 17/8	54 / 2 <sup>1</sup> /8	60 / 2³/8	100 / 315/16	110 / 4 <sup>5</sup> / <sub>16</sub>
Length	L		113 / 41/2	124 / 47/8	188 / 73/8	199 / 71/8	228 / 9	236 / 91/4	260 / 101/4	290 / 117/16	290 / 11 <sup>7</sup> /16
Control chamber volume		cc / gal	36 /	0.01		180 /	0.04			250 / 0.05	
Weight		kg / lbs	0.2 / 0.44	0.2 / 0.44	0.9 / 2	0.9 / 2	1.2 / 2.6	1.4 / 3.1	1.8 / 4.4	3 / 6.8	4 / 8.8

R: Reduced, 3R: 323", 4R: 434"

\* Dimensions for these diameters include flanges



# $\rightarrow$ Head loss



#### → Material specification

#	Part	Material
1	Body	Polypropylene
2	Bonnet	Polypropylene
3	Diaphragm	ALD70
4	Spring	SST 316





# $\rightarrow$ Description guide

To correctly define a valve with its respective accessories and according to the needs, the following selection parameters can be used.

# $\rightarrow$ Flowchart to determine the desired product definition

1 Serie	2 Material	3 Nom	3 4 Nominal diameter C		onfiguration	5 Conection		6 Main function		
S75	PP Polypropylene	3⁄4"	¾" (20 mm)	Н	Horizontal	NPT	NPT	BAS	Basic	
		1"	1" (25 mm)	А	Angle	BSP	BSP	MAN	Manual control on/off	
		1½"	1½" (40 mm)			UNF	Universal flange*	HYD	Hydraulic control on/off	
		2"	2" (50 mm)			VIC	Grooved	ELE	Electric control on/off	
		2½"	2½" (65 mm)			GLUE	PVC solvent welded	PRV	Pressure reducing	
		3"R	323" (80 x 50 x 80 mm)					PSV	Pressure sustaining (& relief)	
		3"	3" (80 mm)					PRS	Pressure reducing & sustaining	
		4"R	434" (100 x 80 x 100 mm)					FLV	Flow control	
		4"	4" (100 mm)					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	

7 Pilot		8 Pilo	ot spring
PP	Plastic pilot	Y	Yellow spring
MP	Metal pilot*	G	Green spring
* for me	etal valve only	R	Red spring

	0		10		4.4		
	9 Solenoid	d type	Valve>s	mode	Accessories		
J	AQAC	Solenoid Aqautive 24AC	3WNC 3-Way N.C		C/2C	Check point (1 unit, 2 unit)	
	AQDC	Solenoid Aqautive 12-40VDC latch	2WNC	2-Way N.C	P/2P	Pressure gauge (1 unit, 2 unit)	
	D24A	Dorot solenoid 24VAC	3WN0	3-Way N.O	Н	Hydraulic relay	
	D24D	Dorot solenoid 24VDC	2WNO	2-Way N.O	F	Float	
	D12D	Dorot solenoid 12VDC	2W	2-Way*	0	Orifice	
	D12L	Dorot solenoid 12VDC latch	ЗW	3-Way*	Т	Shuttle T	
	24AC	Other solenoid 24VAC	* Manual co	ntrol only	Ν	Non-return feature	
	24DC	Other solenoid 24VDC			S	3 Way manual valve	
	12DC	Other solenoid 12VDC			LP	Low pressure diaphragm	
	12DL	Other solenoid 12VDC latch			HP	High pressure diaphragm	
					MIN	Mining	

SV

Shreader





#### → Catalog numbers examples

Serie	Material	Diameter (inch)	Configuration	Connection type	Main function	Solenoid type/Pilot	Valves mode	Accessories	Catalog number
S75	PP	1"	Н	NPT	ELE	24AC	3WNC	S MIN	71640-000754
S75	PP	2"	Н	BSP	BAS		3W	N MIN	71600-000035
S75	PP	2"	Н	BSP	PRV	PPY	3W	C MIN	71600-000163
S75	PP	2"	Н	BSP	PRV	PPY	3W	C S MIN	71600-002327
S75	PP	2"	Н	BSP	PRV	PPY	3W	C S MIN	71600-008798
S75	PP	3"	Н	BSP	ELE	AQDC	3WNC	MIN	71640-000076
S75	PP	4"	Н	UNF	PRV	PPG	3W	C MIN	71600-000134
S75	PP	4"	Н	UNF	ELE	AQDC	3WNC	MIN	71640-000074

\*Other configurations are available upon request

The products defined for mining (MIN) are composed of ALD\* diaphragms and SST 316 (stainless steel) spring.

\*ALD The qualities and resistance of this material are presented below.

Some of these valves can also be ordered with the relevant components manufactured of Hastelloy (resistant against chlorine gas, hypochlorite and chlorine dioxide solutions). The alloy is characterized by excellent resistance against concentrated solutions of oxidizing salts (such as iron III and copper chloride)

#### → Catalog numbers

The type of valve and his catalog number will be determined according to the specific conditions in each application. For a correct configuration of a required valve please contact us at Mining@netafim.orbia.com or contact your Netafim<sup>™</sup> local representative.





# 75 Series 3"H - 8"R

The strong and versatile Polypropylene valves of the 75 Series exhibit exceptional hydraulic characteristics and provide optimal control of leaching systems.



Long-lasting



durability



Versatility

# / Benefits & Features

- Long-lasting Engineered with durability in mind, enabling repeated installations and extended use. Supports long-term performance and reliability.
- High durability Offers superior resistance to chemicals and acids, minimizing maintenance costs. Components are crafted from materials designed to withstand high acid concentrations found in mines.
- → Versatility

 $\rightarrow$ 

Includes a full selection of control functions and end connections. Ensures compatibility and seamless integration.

# / Specifications

- Maximum pressure 12 bar (175 psi).
- Minimum recommended flow 1 m³/h (5 gpm).
- Minimum operating pressure 0.4 bar (6 psi)\*.
- Maximum operating temperature 60°C (140°F).

\* Available with low pressure diaphragm





## → Hydraulic performance

Diameter	inch	ЗН	4	6R	6	8R
	mm	80	100	150	150	200
Flow rate factor**	Kv (metric)	250	350	350	580	580
	Cv (US)	290	405	405	670	670

\*\* 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"H	3"H	4	4	6R	6*	8R
		mm	80	80	100	100	150	150	200
Connection typ	e		Thread	Flange	Groove	Flange			
Hoight	Н		162 / 6³/8	<b>190 / 7</b> 1/2	160 / 7	230 / 9	285 / 111/5	285 / 111/5	307 / 12
Height	W	mm / inch	236 / 9²/7	236 / 9²/7	236 / 9²/7	236 / 9²/7	285 / 111/5	285 / 111/5	307 / 12
Length	L		452 / 17 <sup>3</sup> /4	485 / 19	350 / 133/4	373 / 141/2	420 / 16 <sup>1</sup> /2	420 / 161/2	500 / 19 <sup>2</sup> /3
Control chamber volume cc / gal					500 / 0.13	-		1000	/ 0.26
Weight		kg / lbs	4.7 / 10.4	6 / 13.2	3.9 / 8.6	6 / 13.2	7.5 / 16.5	10.6 / 23.4	13.8 / 30.4

6R: 646" 8R: 868", H: High Flow, 3H: 343"

\* Dimensions for these diameters include flanges





# $\rightarrow$ Material specification

#	Part	Material
1	Body	Polypropylene
2	Nut	SST 316
3	Diaphragm	ALD, EPDM
4	Spring	SST 316
5	Bonnet	Polypropylene
6	Washer	SST 316
7	Bolt	SST 316









#### $\rightarrow$ Catalog numbers

The type of valve and his catalog number will be determined according to the specific conditions in each application. For a correct configuration of a required valve please contact us at <u>Mining@netafim.orbia.com</u> or contact your Netafim<sup>™</sup> local representative.







#### $\rightarrow$ Connection types



Note: Available in an array of sizes from 3"H to 8"R

