

# Catalog Numbers of 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	71640-001581	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	71640-002160	71640-002161	71600-010975
	Uni. FLN.	71640-002154	71640-002153	71600-003541	71640-002166	71640-002167	71600-035966	71600-003438
3" h	Thr. BSP	71600-003356	71600-003353	71600-003358	71600-003361	71600-003360		
	Thr. NPT	71600-003355	71600-003354	71600-003357	71600-003362	71600-003359		
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
6"	Uni. FLN.	71640-000008	71640-000007	71600-000025	71640-000003	71640-000004	71600-000026	
8"r	Uni. FLN.	71640-000010	71640-000009	71600-000018	71640-000006	71640-000005	71600-000027	

\*\* 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
3/4"	Straight	Threaded BSP	71640-007320	71640-007330				
1"	Straight	Threaded BSP	71640-007390	71640-007370				
1½"	Straight	Threaded 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	Threaded 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	Threaded BSP	71640-004990	71640-018221	71600-009475	71640-004810	71640-002145	71600-013442
		Universal flanged	71640-004992	71640-017034	71600-051015	71640-005176	71640-004991	71600-013443
4"R	Angle	Universal flanged	71640-018241	71640-018242	71600-051110	71640-018240	71640-005196	71600-051120

### Notes:

- Electric valves of diameters below 2" are 2-Way
- Available also in 3-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"	Flange ISO	71600-052310	71640-005009	71640-005025	71600-050265	71600-050270	71600-050354
	Flange BSTD	71600-009125	71640-005020	71640-016990	71600-011300	71600-009453	71600-014145
4"	Flange ISO	71600-050369	71640-005455	71640-006220	71600-050310	71600-050300	71600-014256
	Flange BSTD	71600-009590	71640-005210	71640-005225	71600-011540	71600-050302	71600-050301
6"	Flange ISO	71600-051511	71640-016671	71640-016672	71600-004421	71600-051510	71600-050372
	Flange BSTD	71600-004420	71640-005868	71640-016662	71600-051521	71600-011755	71600-004301
8"	Flange ISO	71600-009893	71640-017115	71640-006126	71600-051600	71600-004699	
	Flange BSTD	71600-051603	71640-006120	71640-006127	71600-011800	71600-011810	

# 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 remote-controlled 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 (in the case of power failure, for example). The valve is assembled on a T-junction of the main pipeline, and 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.

# Description Guide

Please follow the ordering guide below and contact a Netafim representative

1 Series	
S75	75 Plastic
S75T	75PI + throttle
S80	80 Plastic
S80T	80PI + throttle
S80V	80 "T" one chamber
S80W	80 "T" dual chamber
S90	90 PVC
S100	100 Metal
S300	300 Metal
S500	500 Metal

2 Material	
PL	Reinforced nylon
PP	Polypropylene
PV	PVC
CI	Cast iron
DI	Ductile iron
BR	Bronze
ST	Stainless steel

3 Nominal Diameter	
¾"	¾" (20mm)
1"	1" (25mm)
1½"	1½" (40mm)
2"	2" (50mm)
2½"	2½" (65mm)
3"R	323" (80 x 50 x 80mm)
3"	3" (80mm)
3"H	343" (80 x 100 x 80mm)
4"R	434" (100 x 80 x 100mm)
4"	4" (100mm)
90	90mm (PVC)
110	110mm (PVC)
160	160mm (PVC)
6"R	6" (150 x 100 x 150mm)
6"	6" (150mm)
8"R	868" (200 x 150 x 200mm)
8"	8" (200mm)
10"	10" (250mm)
12"	12" (300mm)
14"	14" (350mm)
16"	16" (400mm)
18"	18" (450mm)
20"	20" (500mm)
24"	24" (600mm)
28"	28" (700mm)
32"	32" (800mm)

## Example

**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> 2P<sup>11</sup>**

4 Configuration	
H	Horizontal
A	Angle

5 Connection	
NPT	NPT
BSP	BSP
UNF	Universal flange*
DN10	ISO PN10**
DN16	ISO PN16**
AN12	ANSI 125**
AN15	ANSI 150**
BSTD	BSTD**
BSTE	BSTE**
ABNT	ABNT**
VIC	Grooved
GLUE	PVC solvent welded

\* Plastic only \*\* Metal only

6 Main Function	
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

\* for PRS: 1st value for the PR and 2nd value for the PS

7 Pilot	
PP	Plastic pilot
MP	Metal pilot*

\* for metal valve only

8 Pilot Spring	
Y	Yellow spring
G	Green spring
R	Red spring

9 Solenoid Type	
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

10 Valve's Mode	
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

11 Accessories	
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
MIN	Mining
SV	Shreader

# Pilots Standards Table

Valve			Accessories				
Function	Type	Pressure Grade	Pilot *	Check Point		Pressure Gauge	
				Upstream	Downstream	Upstream	Downstream
Pressure Reducing Valve	Plastic up to 8"R	PN-10	29-100 / 29-50M		✓		
	Metal up to 6"	PN-10	29-100 / 29-50M		✓		
		PN-16	31-100M (3W) 68-410 (2W)				✓
	Metal 8" & up	All standards	31-310				✓
Pressure Sustaining Valve	Plastic up to 8"R	PN-10	29-200 / 29-50M	✓			
	Metal up to 6"	PN-10	29-200 / 29-50M	✓			
		PN-16	31-100M (3W) 68-510 (2W)			✓	
	Metal 8" & up	All standards	31-310			✓	
Pressure Reducing & Sustaining Valve	Plastic up to 8"R	PN-10 *	29-100 / 29-200 / 29-50M	✓	✓		
	Metal up to 6"	PN-10 *	29-100 / 29-200 / 29-50M	✓	✓		
		PN-16	31-100M + 31-100M (3W) 68-410 (2W) 68-510 (2W)			✓	✓
	Metal 8" & up	All standards	31-310 / 31-310			✓	✓
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 High Pressure tubes (other tubings - optional upon request)					

\* Available pilots in this configuration

## → Pilots

	29-100	29-10R	29-200	29-50M	29-500	68-215	31-100M	31-310
Pilot								
Pressure Range bar (psi)	0.3-3 / 4-40	0.4-3.5 / 6-50	0.3-3 / 5-45	0.3-3 / 4-40	1-8 / 15-115			0.3-6 / 4.5-90
	0.5-4.5 / 7-65	0.5-5.5 / 7-80	0.5-4.5 / 7-65	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
	1-7.5 / 15-110	1-8.5 / 15-125	1-7.5 / 15-110	1-7.5 / 15-110		2-16 / 30-230	1.5-12 / 22-175	0.6-15 / 9-220