

# FIRE HYDRANTS

YYH

2016 - 11



# YAKACIK Fire Hydrants



## Field of Application

Fire hydrants are used to extinguish fire at buildings, factories, industrial plants etc.

## Main Components

YAKACIK VALF Fire Hydrants are compatible with TSE 2821/1. Main components are cast iron body, operating equipment (valve), stem which transmits motion to valve, automatic discharge equipment and hose assembly parts.



## Working Principle

When the operating nut is turned in opening direction by a special hydrant wrench, the stem moves down. Disc is separated from the seat and water flow starts. When operating nut is turned in closing direction, the disc contacts with the seat and halts the water flow. In the closed position, the water pressure exerts a force on disc in closing direction which enhances leaktightness.

### ■ Immediate Intervention

YAKACIK VALF fire hydrants provide water to fire fighters in a very short time. They enable immediate intervention to minimize human life and property loss.

### ■ No Shock Effect

The cross section of the YAKACIK VALF fire hydrants is uniform which prevents water turbulence. Shock effect is eliminated and the fire fighter can easily handle the hose.

### ■ Automatic Discharging

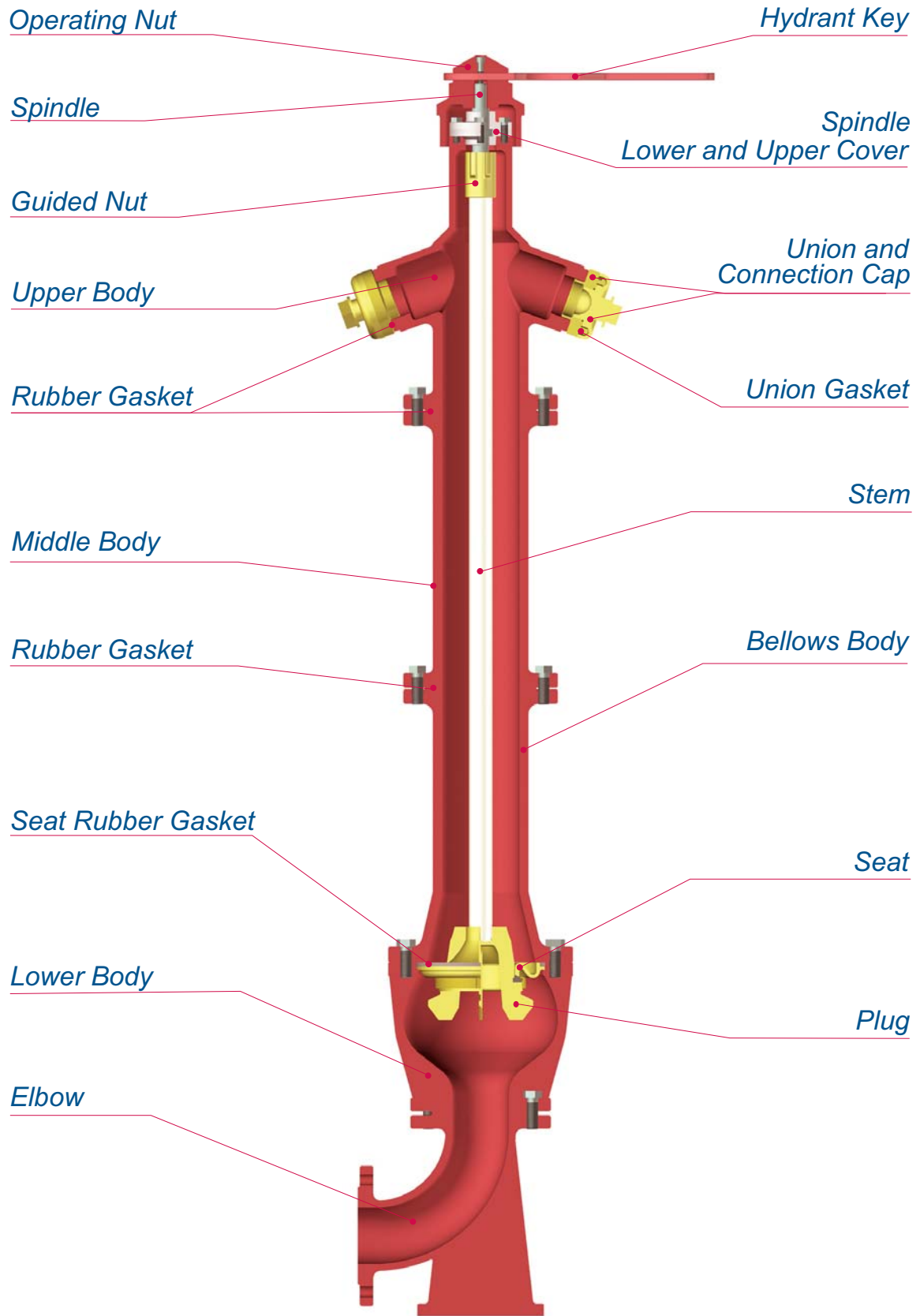
The automatic discharge equipment discharges the residual water in the body to protect the hydrant against freezing.

### ■ No Pumping Action

Since water pressure exerts a force in the closing direction, It is easy to shut off the water flow.

### ■ Long Life

When the hydrant is in open position, wing form of the plug prevents vibration. Having negligible vibration provides long service life.





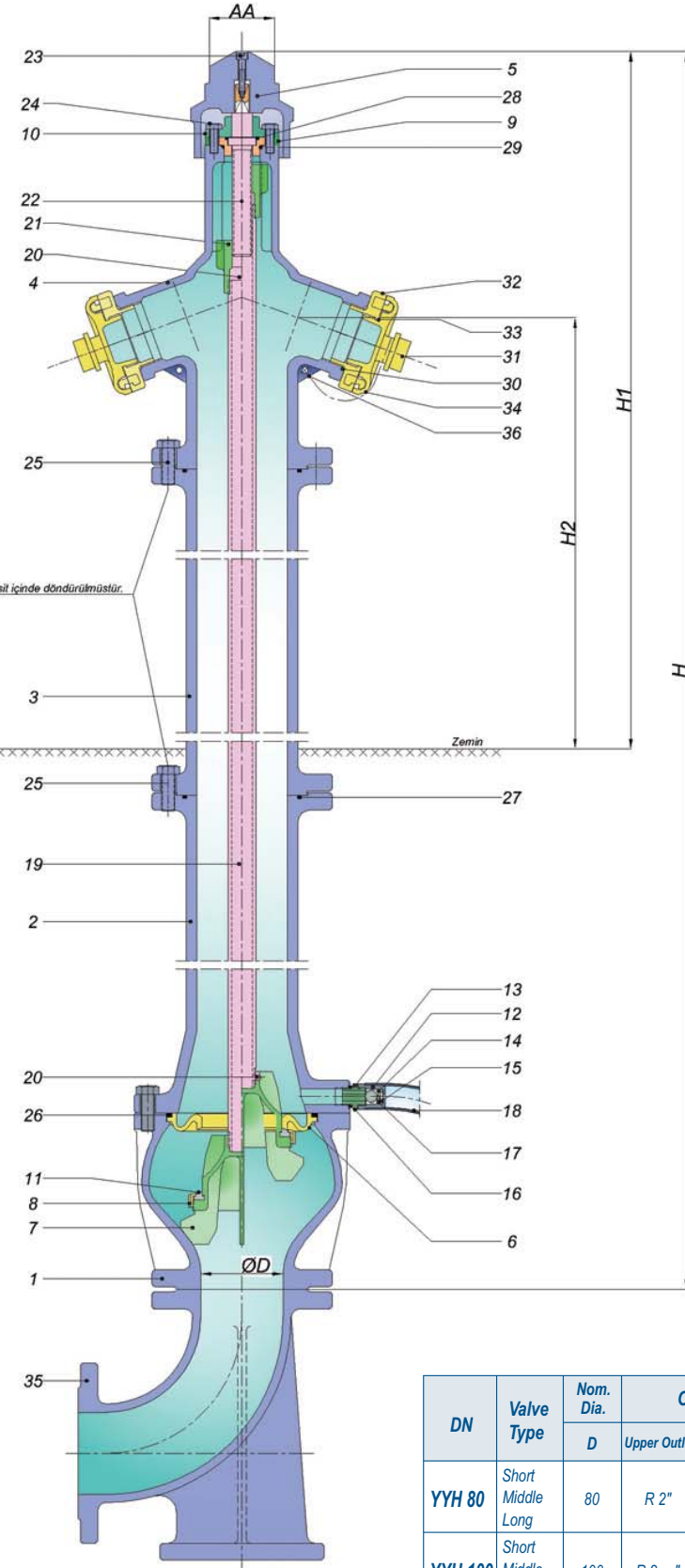
# YAKACIK Fire Hydrants



## DN 80-100-150

### Tip: YYH

### Short-Middle-Long



DN	Valve Type	Nom. Dia.	Outlets		Dimensions			
		D	Upper Outlet	Lower Outlet	H	H1	H2	AA
YYH 80	Short	80	R 2"	—	1435	1030	630	70
	Middle				1750			
	Long				2150			
YYH 100	Short	100	R 2 1/2"	R 4"	1435	1030	630	70
	Middle				1750			
	Long				2150			
YYH 150	Long	150	R 2 1/2"	R 4"	2150	1030	710	70

Material Type	Cast Iron	Ductile Iron
Size	DN 80-100	DN 80-100
Pressure Class	PN16	PN16
Dimensions	TS EN 14384	TS EN 14384
Assembly	Flanged according to DIN EN 1902-2 PN 16	Flanged according to DIN EN 1902-2 PN 16
Unions	According to TS 12258	According to TS 12258
Flanged Elbow	According to DIN 28538	According to DIN 28538
Hydrant Key	According to TS 37398	According to TS 37398
Order Code	YFH.2F. ____	YFH.8F. ____

P.No	Part Name	Cast Iron	Ductile Iron
1	Lower Body	GJL 250	0.7040
2	Bellows Body	GJL 250	0.7040
3	Middle Body	GJL 250	0.7040
4	Upper Body	GJL 250	0.7040
5	Operating Nut	GJL 250	0.7040
6	Seat	Ck 22 + 1.4408*	Ck 22 + 1.4408
7	Plug	0.7040*	0.7040*
8	Plug Nut	0.7040*	0.7040*
9	Spindle Bear	St-42 + Gal.	St-42 + Gal.
10	Upper Cover	St-42 + Gal.	St-42 + Gal.
11	Plug Gasket	Nitrile Rubber	Nitrile Rubber
12	Drain Valve Body	Ms-58	Ms-58
13	Drain Valve Nipple	Ms-58	Ms-58
14	Drain Valve Spring	1.4310	1.4310
15	Drain Valve Seat	Nitrile Rubber	Nitrile Rubber
16	Drain Valve Gasket	Nitrile Rubber	Nitrile Rubber
17	Drain Valve Ball	Glass	Glass
18	Drain Valve Discharging Hose	Plastic	Plastic
19	Stem 1"	St-42	St-42
20	Stem Pin	Ms-58	Ms-58
21	Guided Nut	Ms-58	Ms-58
22	Spindle	1.4021	1.4021
23	Setscrew M8x40	8.8+Gal.	8.8+Gal.
24	Bolt	8.8+Gal.	8.8+Gal.
25	Bolt	8.8+Gal.	8.8+Gal.
26	O-Ring	Nitrile Rubber	Nitrile Rubber
27	O-Ring	Nitrile Rubber	Nitrile Rubber
28	O-Ring	Nitrile Rubber	Nitrile Rubber
29	O-Ring	Nitrile Rubber	Nitrile Rubber
30	O-Ring	Nitrile Rubber	Nitrile Rubber
31	Connection Cap	Al*	Al*
32	Union	Al*	Al*
33	Union Gasket	Nitrile Rubber	Nitrile Rubber
34	Union Chain	St-37	St-37
35	Elbow	GJL 250	0.7040
36	Union Chain Fixing Ring	St-37	St-37

\* Upon request, 1.4408 may be produced

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## Quantity and Location

It is generally accepted that 3 (max. 4) hydrants are enough to extinguish a medium building fire in 3 to 15 minutes.

1-) Sufficient number of hydrant must be located outside of the building and two hoses must be connected.

Distance between hydrants:

- In factories and depots : 40-50 meters
- In residential areas : 150 meters

2-) Distance between the hydrant and the building should not be less than 12 meters under normal conditions.

The closer the distance is, the higher the adverse effect of high temperature to hydrant usage.

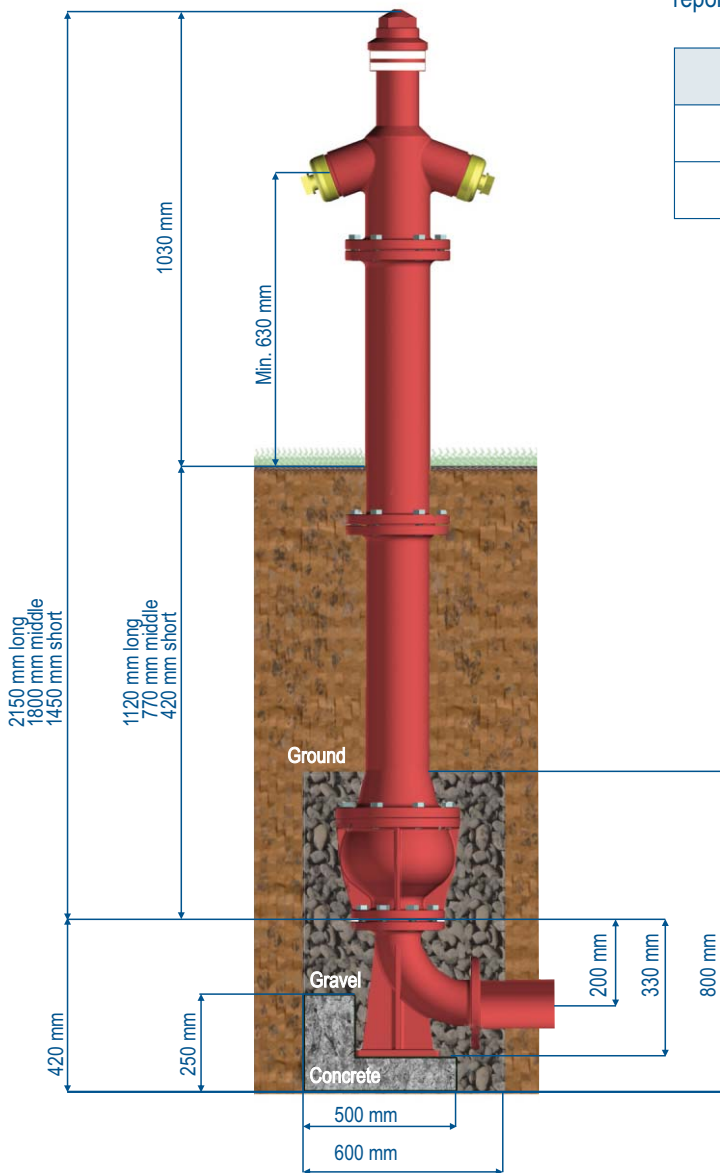
3-) The hydrants must be located on smooth stones or concrete, the vicinity of automatic discharge (drain valve) must not be filled with gravels, shingles etc.

4-) The centre height of the union must not be less than 630 mm above the ground.

5-) When the pipes are to be replaced with the new ones, the new pipes must be cleaned before mounting.

Hydromechanical tests of YAKACIK VALF Fire Hydrants were carried by ITU Mechanical Engineering Department, Hydromechanical Laboratories with the report number 96/21. The results are as follows:

Size	Flow Single Outlet	Flow Double Outlets
DN 80	73* m <sup>3</sup> /h	90 m <sup>3</sup> /h
DN 100	116 m <sup>3</sup> /h	128 m <sup>3</sup> /h



YAKACIK VALF Fire Hydrants Assembly Dimensions



Fire Hydrants Mounting Example

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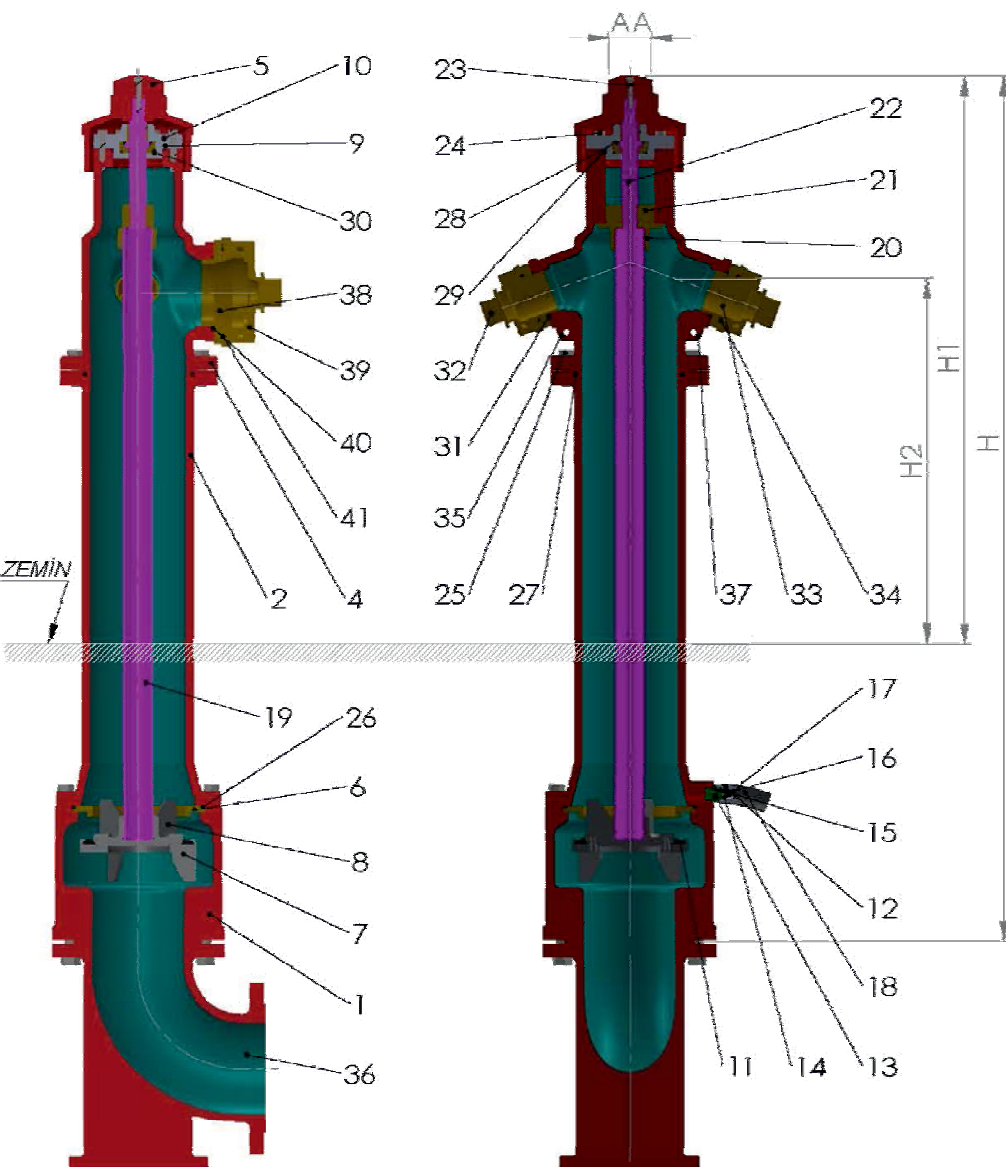
# YAKACIK Fire Hydrants



## DN 150

## Type: YYH

## Short-Long



Material Type	Cast Iron	Ductile Iron
Size	DN 150	DN 150
Pressure Class	PN16	PN16
Dimensions	TS EN 14384	TS EN 14384
Assembly	Flanged according to DIN EN 1902-2 PN 16	Flanged according to DIN EN 1902-2 PN 16
Unions	According to TS 12258	According to TS 12258
Flanged Elbow	According to DIN 28538	According to DIN 28538
Hydrant Key	According to TS 37398	According to TS 37398
Order Code	YFH.2F ____	YFH.8F ____

P.No	Part Name	Cast Iron	Ductile Iron
1	Lower Body	GJL-250	0.7040
2	Body	GJL 250	0.7040
3	Middle Body	GJL 250	0.7040
4	Upper Body	GJL 250	0.7040
5	Operating Nut	GJL 250	0.7040
6	Seat	Ck 22 + 1.4408*	Ck 22 + 1.4408*
7	Plug	0.7040*	0.7040*
8	Plug Nut	0.7040*	0.7040*
9	Spindle Bear	St-42 + gal.	St-42 + gal.
10	Upper Cover	St-42 + gal.	St-42 + gal.
11	Plug Gasket	NBR	NBR
12	Drain Valve Body	Ms-58	Ms-58
13	Drain Valve Nipple	Ms-58	Ms-58
14	Drain Valve Spring	1.4310	1.4310
15	Drain Valve Seat	NBR	NBR
16	Drain Valve Gasket	NBR	NBR
17	Drain Valve Ball	Glass	Glass
18	Drain Valve Discharging Hose	Plastic	Plastic
19	Stem 1"	St-42	St-42
20	Stem Pin	Ms-58	Ms-58
21	Guided Nut	Ms-58	Ms-58
22	Spindle	1.4021	1.4021
23	Setscrew M8x40	8.8+Gal.	8.8+Gal.
24	Bolt	8.8+Gal.	8.8+Gal.
25	Bolt	8.8+Gal.	8.8+Gal.
26	O-ring	NBR	NBR
27	O-ring	NBR	NBR
28	O-ring	NBR	NBR
29	O-ring	NBR	NBR
30	O-ring	NBR	NBR
31	O-ring	NBR	NBR
32	Connection Cap	Al*	Al*
33	Union	Al*	Al*
34	Union Gasket	NBR	NBR
35	Union Chain	St-37	St-37
36	Elbow	GJL 250	0.7040
37	Union Chain Fixing Ring	St-37	St-37
38	Connection Cap 4"	GJL250	0.7040
39	Union 4"	GJL250	0.7040
40	Union Gasket 4"	NBR	NBR
41	Union Chain 4"	St-37	St-37

DN	Valve Type	Nom. Dia.	Outlets		Dimensions			
		D	Upper Outlet	Lower Outlet	H	H1	H2	AA
YYH 150	Long Tip	150	R 2" 1/2"	R 4"	2150	1030	710	70
YYH 150	Short Tip	150	R 2" 1/2"	R 4"	1435	1030	710	70

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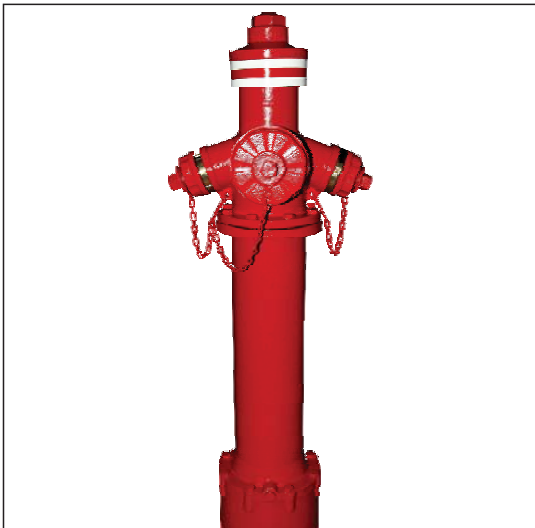
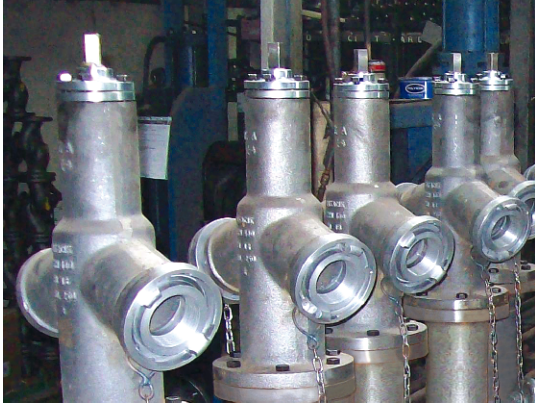


# YAKACIK Fire Hydrants



## Economic, Easy to Service

*When YAKACIK VALF Fire Hydrants are compared to one piece body hydrants, they are economically more advantageous. Since the upper body and the middle body are two separate parts, it is cheaper to replace just the worn out part instead of whole one piece body.*





**ISO 9001-2008**

QUALITY MANAGEMENT SYSTEM



**AD 2000 - W 0**

MANUFACTURING QUALIFIED CERTIFICATE

**CE 2354**

PED 97/23 EC / III MODULE H

**FIRE SAFE**

BALL VALVES - CAST STEEL

**FIRE SAFE**

PISTON VALVES - CAST STEEL

**TPED 99 36**

TRANSPORTABLE PRESSURE

**GOST**

ALL PRODUCTS