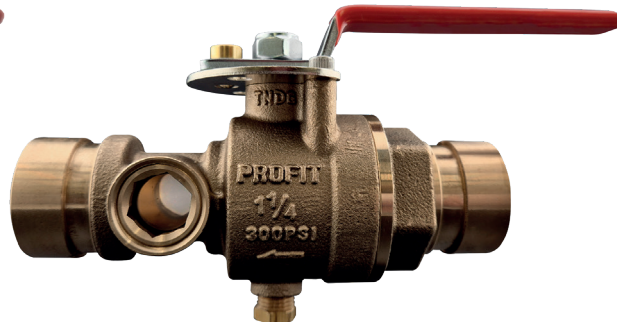


Size range TNDT: 1" - 2"

Size range TNDG: 1¼" - 2" 



Type TNDT



 Type TNDG

The Profit threaded and grooved test and drain valves for sprinkler systems serves two primary purposes. It allows regular testing by simulating the needed waterflow in fire conditions, and provides the possibility for controlled drainage. They are essential components for maintaining the system's efficiency and preventing failures during a fire.

Characteristics

- Outer ends:
 - Threaded (TNDT): EN 10226-1 / ISO7 Female thread BSPT.
 - Grooved (TNDG): BSP groove complies to AWWA C606.
- Can be mounted in any orientation.
- Three lever positions: Test, Drain, and Off.
- Integrated sight glass for sprinkler pipe testing purposes.
- Complies with the requirements of NFPA-13, NFPA-13R, and NFPA-13D.
- Opening in the indicator plate to secure the position with padlock.
- ¼" plug for system access, not recommended for gauge installation.

Working pressure

- Rated working pressure:
2,07 MPa / 20,7 bar / 300 psi.
- Tested up to 4,20 MPa / 42,0 bar / 610 psi.

Approvals

- FM approved to FM standard 1625.
- UL 258 listed.

Working temperature

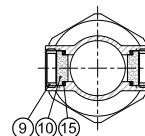
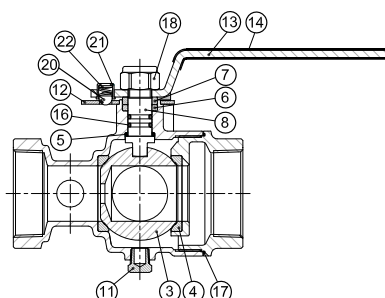
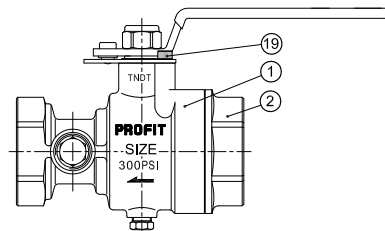
-10°C to +80°C.

WARNING

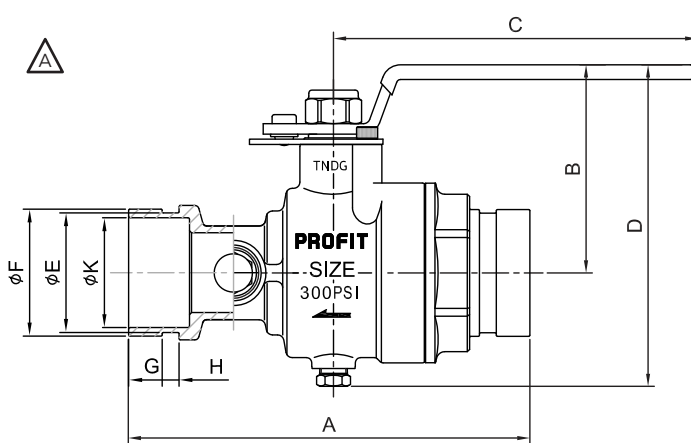
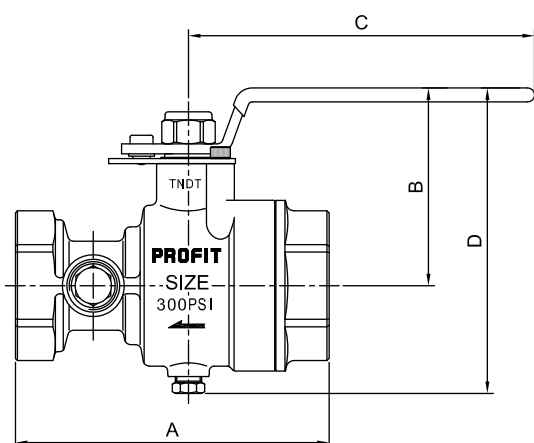
Freezing of any fluid in the valve may severely damage the valve.

Material specifications

No.	Part name	Material ASTM
1	Body	Brass ASTM B283 C46400
2	End piece	Brass ASTM B283 C46400
3	Ball	Brass ASTM B283 C48600
4	Seat	TFM
5	Thrust washer	TFM
6	Gland packing	TFM
7	Gland	Brass ASTM B283 C48600
8	Stem	Brass ASTM B283 C48600
9	Retaining ring	Brass C3604
10	Sight glass	PMMA
11	Drain plug 1/4" NPT	Brass ASTM B283 C48600
12	Indicator plate	Galvanised steel
13	Lever	Galvanised steel
14	Lever Grip	PVC Vinyl
15	Packing	EP06880PWRC
16	O-ring	EP00570
17	O-ring (1-1/2"~2")	EP00570
18	Lock nut	Galvanised steel
19	Stop screw	Stainless steel ASTM A240 Type304
20	Ball	Stainless steel ASTM A240 Type304
21	Plunger	Brass ASTM B283 C48600
22	Spring	Stainless steel ASTM A240 Type304



Dimensions



Type TNDT

No. / Size	mm				Weight kg
	A ±2	B ±2	C ±2	D ±3	
1"	128,2	68,5	130,5	112	1,2
1 1/4"	128,2	68,5	130,5	112	1,3
1 1/2"	157,2	99,1	174	154	2,6
2"	157,2	99,1	174	154	2,7

Type TNDG

No. / Size	mm									Weight kg
	A ±2	B ±2	C ±2	D ±3	Ø E	F	G ±0,76	H ±0,76	K ±0,2	
1 1/4"	161,6	68,5	130,5	112	38,99	42,4 ±0,41			35,2	1,4
1 1/2"	190,9	99,1	174	154	45,09	48,3 ±0,48	15,88	7,95	40,9	2,6
2"	190,9	99,1	174	154	57,15	60,3 ±0,61			52,3	2,8

Product specification

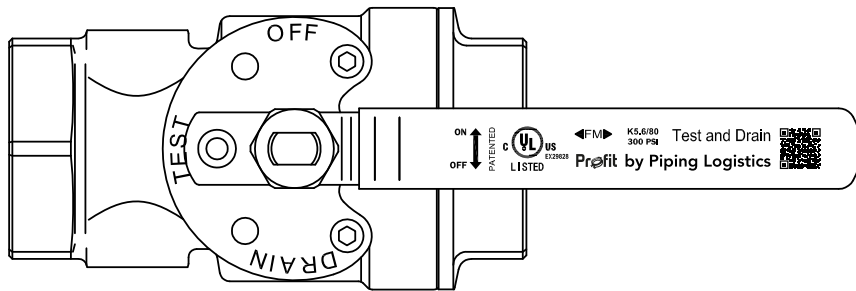
Threaded, Type TNDT:

Reference	Nominal pipe size		K-factor		Approvals	
	in	mm	Imperial gpm/(psi) ^{1/2} "	Metric L/min/(bar) ^{1/2} "	UL	FM
TNDT1-4,2	1	25	4,2	60	UL	FM
TNDT1-5,6			5,6	80	UL	FM
TNDT1-8			8,0	115	UL	FM
TNDT1¼-4,2	1¼	32	4,2	60	UL	FM
TNDT1¼-5,6			5,6	80	UL	FM
TNDT1¼-8			8,0	115	UL	FM
TNDT1¼-14			14,0	200	UL	FM
TNDT1½-4,2	1½	40	4,2	60	UL	FM
TNDT1½-5,6			5,6	80	UL	FM
TNDT1½-8			8,0	115	UL	FM
TNDT1½-14			14,0	200	UL	FM
TNDT1½-16,8			16,8	240	UL	FM
TNDT1½-25,2			25,2	365	UL	FM
TNDT2-4,2	2	50	4,2	60	UL	FM
TNDT2-5,6			5,6	80	UL	FM
TNDT2-8			8,0	115	UL	FM
TNDT2-14			14,0	200	UL	FM
TNDT2-16,8			16,8	240	UL	FM
TNDT2-25,2			25,2	365	UL	FM

Grooved, Type TNDG:

Reference	Nominal pipe size		K-factor		Approvals	
	in	mm	Imperial gpm/(psi) ^{1/2} "	Metric L/min/(bar) ^{1/2} "	UL	FM
TNDG1¼-4,2	1¼	32	4,2	60	UL	FM
TNDG1¼-5,6			5,6	80	UL	FM
TNDG1¼-8			8	115	UL	FM
TNDG1¼-14			14	200	UL	FM
TNDG1½-4,2	1½	40	4,2	60	UL	FM
TNDG1½-5,6			5,6	80	UL	FM
TNDG1½-8			8	115		FM
TNDG1½-14			14	200	UL	FM
TNDG1½-16,8			16,8	240	UL	FM
TNDG1½-25,2			25	360	UL	FM
TNDG2-4,2	2	50	4,2	60	UL	FM
TNDG2-5,6			5,6	80	UL	FM
TNDG2-8			8	115	UL	FM
TNDG2-14			14	200	UL	FM
TNDG2-16,8			16	240	UL	FM
TNDG2-25,2			25,2	365	UL	FM

Marking



Installation, maintenance & operating instructions

Products must be installed exclusively by qualified personnel and strictly following the instructions below. All installations must be performed in accordance with local regulations and plumbing codes.

1. The valve may be installed in any orientation. however, the arrow on the valve body must point in the direction of flow - towards the drain.

ATTENTION: tightness of connections between fittings, couplings or hoses with valves must be verified on site after installation using diligent caution, before the system is started. This applies also when the valve is supplied with such components already assembled.

A) INSTALLATION – THREADED (Type TNDT)

- 2a. Prepare the pipes with sealant material on the male tread. We recommend use of pipe dope for threads. If you prefer to use Teflon® tape do not exceed four layers. If dry seal threads are used without dope or tape, we suggest lubricating the threads with a little oil or grease before assembly.
- 3a. Screwing valve onto pipe. Hold the valve at the flats immediately next to the pipe being installed (not at the opposite end). Holding the valve with a pipe wrench or at the wrong end may damage the valve.
- 4a. Do not torque the valve excessively. Over-torque may damage the valve. After assembling, rinse the whole system (valves – pipes etc.) to remove contaminants.

B) INSTALLATION – GROOVED (Type TNDG)

- 2b. Ensure that the pipe ends are properly grooved in accordance with AWWA C606 dimensional requirements. Inspect pipe grooves to ensure they are clean, free from burrs, dents, paint build-up, or other damage that may interfere with proper coupling engagement. Verify that pipe dimensions, groove profile, and surface finish are compatible with the selected grooved coupling and gasket.
- 3b. Select a grooved coupling gasket suitable for the system medium, pressure rating, and temperature range. Recommended couplings are Fitpro® or GKA from Profit. Follow the installation instructions of the selected groove coupling.
- 4b. After assembly, visually inspect all grooved connections to confirm proper alignment and full engagement of the coupling into the grooves.



5. Verify that the valve lever moves freely between the OFF – DRAIN – TEST positions without obstruction. Before putting the system into service, perform a pressure test in accordance with applicable standards and local regulations, and confirm that no leakage is present at the grooved connections or valve body.

OPERATING INSTRUCTIONS:

There are 3 different positions in the test and drain valve, "OFF" – "DRAIN" – "TEST". The angle between the positions is 90°.

1. There is no water passage while the valve is in the "OFF" position.
2. When set to "DRAIN", it can be used as a discharge valve.
3. When the valve switches to the "TEST" position, thanks to the special design of the valve bonnet; the water passages from orifice corresponding to a certain K-factor. The sprinkler burst is simulated. At the same time it helps to test the alarm devices.

INSPECTIONS:

Check the valve periodically to ensure proper performance (in complete closed position, flow of media must stop and no leaks shall be detected). More frequent inspections are recommended under extreme operating conditions, i.e. conditions approaching the temperature and/or pressure limits indicated in the specifications for the product, or in the event of valves subject to vibrations, bending and/or torsion. A combination of two or more factors must be considered as extreme operating conditions thus inspections must be increased.

WARNING: For your safety, it is important to carefully follow the instructions below, before removing the valve from the line or disassembling it.

- Wear any protective clothing and equipment normally required when working with the fluid involved.
- This product has been inspected according to Piping Logistics quality procedures. If you ascertain that this valve contains a defect in material and/or due to workmanship, please return it to your seller with a copy of the original box label and the details of your claim (in the event of failure during operation, you should forward details concerning the product position in the system and an analysis of the media flowing through the product). In such cases it is moreover essential to record the installation status of the system through detailed pictures before removing the product. In case of improper application, installation, or maintenance, no claim is accepted. Deterioration or destruction of any part of the valve causes the need for complete replacement of the valve itself; replacement or modification of parts/components of the valve (included assembled devices), causes the immediate withdrawal of Piping Logistics liability, warranty, and certification.
- The packing materials and, when necessary, the valve itself must be disposed of according to the local laws in force. In case of discrepancy between the different versions of these instructions, the reference text is in English language.
- All installations should be performed in accordance with existing local installation regulations and codes of practice where they exist.
- In accordance with REACH Regulation (EC) No. 1907/2006, we hereby inform that brass alloy components used in this product contain lead (CAS No. 7439-92-1) as an alloying element above 0.1% (w/w). Lead was added to the SVHC Candidate List on 27 June 2018. Under normal and intended conditions of use of the product, no exposure to lead is expected. This information is provided to allow safe use of the product in accordance with Article 33 of the REACH Regulation.
- The product is not intended for potable water applications.

GENERAL INFO

- Installers should be trained or experienced to install and understand the product.
- Before installation, carefully check the product on any damage during shipment or handling.
- Read and understand all technical datasheets and installation instructions before attempting to install, remove or adjust any Profit products.
- Check if the pressure rating of the product is compatible with the service conditions.
- Depressurise and drain the sprinkler installation system before attempting to install, remove or adjust any Profit products.
- Never work on piping systems that are pressurised and / or filled with water or pressurized air.
- Piping Logistics reserves the right to change specifications, designs and / or standard equipment without notice and without incurring in any obligations.
- Use the necessary Personal Protection Equipment (PPE) to avoid personal injury (helmet, safety shoes, goggles and gloves).



Failure to follow these instructions could result in property damage, serious injury or death.

Our product must always be stored in closed and dry environments. Once installed on an above ground sprinkler system, they require no specific maintenance.

REVISION TABLE

Date	△	Notes
14/04/2025		Initial release.
29/04/2026	A	Page 1, 2, 3 & 4 - Addition of grooved information (TNDG).