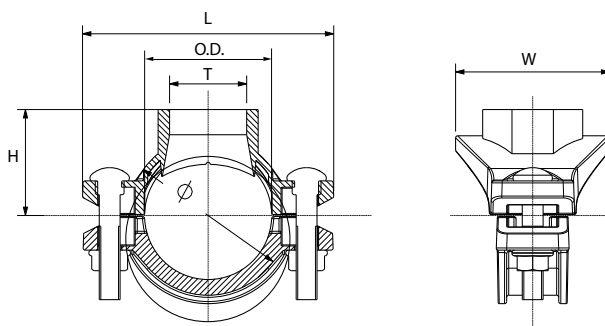


Size range: 2-1¼" - 10-4"
THREADED BSPT OUTLET



Threaded mechanical tees may be used for any tee connection where a threaded outlet is needed.
Some sizes may be converted into a cross when necessary*.

*Mechanical cross not FM and UL certified.



Reference		Nominal size Run - reducing outlet		Pipe Ø O.D. - T	Threaded mechanical tee dimensions				Hole cut*	Bolt size	Bolt torque	Weight	Marking	Approvals	
Red	Galva	NPS inch	DN mm	mm - inch	L mm	H mm	W mm	Ø mm	mm	d1xL mm	Nm	kg		UL	FM
GMDR	GMDG	2 - 1¼	50 - 32	60,3 - 1¼	118	52	73	76	46	M10x50	40 - 60	0,70	GMDX	UL	FM
GMDR	GMDG	2 - 1½	50 - 40	60,3 - 1½	118	62	73	76	46	M10x50	40 - 60	0,73	GMDX	UL	FM
GMDR	GMDG	2½ - 1¼	65 - 32	73,0 - 1¼	134	57	82	93	46	M10x60	40 - 60	0,79	GMDX	UL	FM
GMDR	GMDG	2½ - 1½	65 - 40	73,0 - 1½	134	58	84	93	53	M10x60	40 - 60	0,83	GMDX	UL	FM
GMDR	GMDG	2½ - 1¾	65 - 32	76,1 - 1¾	136	60	82	96	46	M10x60	40 - 60	0,78	GMDX	UL	FM
GMDR	GMDG	2½ - 1½	65 - 40	76,1 - 1½	136	60	84	96	53	M10x60	40 - 60	0,79	GMDX	UL	FM
GMDR	GMDG	2½ - 2	65 - 50	76,1 - 2	136	76	88	96	53	M10x60	40 - 60	0,98	GMDX	UL	FM
GMDR	GMDG	3 - ½	80 - 15	88,9 - ½	142	68	70	110	38	M10x60	40 - 60	0,81	GMDX	UL	FM
GMDR	GMDG	3 - ¾	80 - 20	88,9 - ¾	142	68	70	110	38	M10x60	40 - 60	0,82	GMDX	UL	FM
GMDR	GMDG	3 - 1	80 - 25	88,9 - 1	142	68	70	110	38	M10x60	40 - 60	0,80	GMDX	UL	FM
GMDR	GMDG	3 - 1¼	80 - 32	88,9 - 1¼	142	67	83	110	46	M10x60	40 - 60	0,83	GMDX	UL	FM
GMDR	GMDG	3 - 1½	80 - 40	88,9 - 1½	142	67	85	110	53	M10x60	40 - 60	0,87	GMDX	UL	FM
GMDR	GMDG	3 - 2	80 - 50	88,9 - 2	144	69	96	110	64	M10x60	40 - 60	1,01	GMDX	UL	FM
GMDR	GMDG	3 - 2½	80 - 65	88,9 - 2½	144	87	98	110	64	M10x60	40 - 60	1,40	GMDX		
GMDR	GMDG	4 - ½	100 - 15	114,3 - ½	178	80	72	138	38	M12x65	110 - 130	1,15	GMDX	UL	FM
GMDR	GMDG	4 - ¾	100 - 20	114,3 - ¾	178	80	72	138	38	M12x65	110 - 130	1,14	GMDX	UL	FM
GMDR	GMDG	4 - 1	100 - 25	108,0 - 1	168	76	72	130	38	M12x65	110 - 130	1,06	GMDX	UL	FM
GMDR	GMDG	4 - 1½	100 - 40	108,0 - 1½	168	76	85	130	53	M12x65	110 - 130	1,00	GMDX	UL	FM
GMDR	GMDG	4 - 1	100 - 25	114,3 - 1	178	80	72	138	38	M12x65	110 - 130	1,13	GMDX	UL	FM
GMDR	GMDG	4 - 1¼	100 - 32	114,3 - 1¼	178	80	83	138	46	M12x65	110 - 130	1,03	GMDX	UL	FM
GMDR	GMDG	4 - 1½	100 - 40	114,3 - 1½	178	80	84	138	53	M12x65	110 - 130	1,27	GMDX	UL	FM

Reference		Nominal size Run - reducing outlet		Pipe Ø O.D. - T	Threaded mechanical tee dimensions				Hole cut*	Bolt size	Bolt torque	Weight	Marking	Approvals	
Red	Galva	NPS inch	DN mm	mm - inch	L mm	H mm	W mm	Ø mm	mm	d1xL mm	Nm	kg		UL	FM
GMDR	GMDG	4 - 2	100 - 50	114,3 - 2	178	82	95	138	64	M12x65	110 - 130	1,37	GMDX	UL	FM
GMDR	GMDG	4 - 2½	100 - 65	114,3 - 2½	178	82	114	138	79	M12x65	110 - 130	1,48	GMDX	UL	FM
GMDR	GMDG	4 - 3	100 - 80	114,3 - 3	178	95	126	138	92	M12x65	110 - 130	1,76	GMDX	UL	FM
GMDR	GMDG	5 - 1	125 - 25	133,0 - 1	198	90	72	155	38	M12x65	110 - 130	1,28	GMDX	UL	FM
GMDR	GMDG	5 - 1¼	125 - 32	133,0 - 1¼	198	90	83	155	46	M12x65	110 - 130	1,33	GMDX	UL	FM
GMDR	GMDG	5 - 1	125 - 25	139,7 - 1	206	93	72	162	38	M12x70	110 - 130	1,33	GMDX	UL	FM
GMDR	GMDG	5 - 1¼	125 - 32	139,7 - 1¼	206	93	83	162	46	M12x70	110 - 130	1,47	GMDX	UL	FM
GMDR	GMDG	5 - 1½	125 - 40	139,7 - 1½	206	93	85	162	53	M12x70	110 - 130	1,45	GMDX	UL	FM
GMDR	GMDG	5 - 2	125 - 50	139,7 - 2	206	95	95	162	64	M12x70	110 - 130	1,56	GMDX	UL	FM
GMDR	GMDG	5 - 2½	125 - 65	139,7 - 2½	206	95	114	162	79	M12x70	110 - 130	1,70	GMDX	UL	FM
GMDR	GMDG	5 - 3	125 - 80	139,7 - 3	206	95	128	162	92	M12x70	110 - 130	1,96	GMDX	UL	FM
GMDR	GMDG	5 - 1	125 - 25	141,3 - 1	206	93	72	165	38	M12x70	110 - 130	1,33	GMDX	UL	FM
GMDR	GMDG	5 - 1¼	125 - 32	141,3 - 1¼	206	93	83	165	46	M12x70	110 - 130	1,47	GMDX	UL	FM
GMDR	GMDG	5 - 1½	125 - 40	141,3 - 1½	206	93	85	165	53	M12x70	110 - 130	1,45	GMDX	UL	FM
GMDR	GMDG	5 - 2	125 - 50	141,3 - 2	206	95	95	165	64	M12x70	110 - 130	1,56	GMDX	UL	FM
GMDR	GMDG	5 - 2½	125 - 65	141,3 - 2½	206	95	114	165	79	M12x70	110 - 130	1,76	GMDX	UL	FM
GMDR	GMDG	5 - 3	125 - 80	141,3 - 3	206	95	128	165	92	M12x70	110 - 130	1,96	GMDX	UL	
GMDR	GMDG	6 - 1	150 - 25	165,1 - 1	242	105	72	186	38	M14x75	120 - 140	1,76	GMDX	UL	FM
GMDR	GMDG	6 - 1¼	150 - 32	165,1 - 1¼	242	105	83	186	46	M14x75	120 - 140	1,81	GMDX	UL	FM
GMDR	GMDG	6 - 1½	150 - 40	165,1 - 1½	242	105	85	186	53	M14x75	120 - 140	1,89	GMDX	UL	FM
GMDR	GMDG	6 - 2	150 - 50	165,1 - 2	242	108	95	186	64	M14x75	120 - 140	1,93	GMDX	UL	FM
GMDR	GMDG	6 - 2½	150 - 65	165,1 - 2½	242	108	115	186	79	M14x75	120 - 140	2,18	GMDX	UL	FM
GMDR	GMDG	6 - 3	150 - 80	165,1 - 3	242	108	128	186	92	M14x75	120 - 140	2,24	GMDX	UL	FM
GMDR	GMDG	6 - 4	150 - 100	165,1 - 4	242	112	158	186	114	M14x75	120 - 140	3,07	GMDX	UL	FM
GMDR	GMDG	6 - 1	150 - 25	168,3 - 1	248	111	72	192	38	M14x75	120 - 140	1,89	GMDX	UL	FM
GMDR	GMDG	6 - 1¼	150 - 32	168,3 - 1¼	248	111	83	192	46	M14x75	120 - 140	1,94	GMDX	UL	FM
GMDR	GMDG	6 - 1½	150 - 40	168,3 - 1½	248	111	85	192	53	M14x75	120 - 140	1,96	GMDX	UL	FM
GMDR	GMDG	6 - 2	150 - 50	168,3 - 2	248	111	95	192	64	M14x75	120 - 140	1,99	GMDX	UL	FM
GMDR	GMDG	6 - 2½	150 - 65	168,3 - 2½	248	111	115	192	79	M14x75	120 - 140	2,16	GMDX	UL	FM
GMDR	GMDG	6 - 3	150 - 80	168,3 - 3	248	111	128	192	92	M14x75	120 - 140	2,22	GMDX	UL	FM
GMDR	GMDG	6 - 4	150 - 100	168,3 - 4	248	116	158	192	114	M14x75	120 - 140	3,38	GMDX	UL	FM
GMDR	GMDG	8 - 1	200 - 25	219,1 - 1	298	134	75	244	38	M16x90	130 - 170	2,55	GMDX	UL	FM
GMDR	GMDG	8 - 1¼	200 - 32	219,1 - 1¼	298	137	82	244	46	M16x90	130 - 170	2,55	GMDX	UL	FM
GMDR	GMDG	8 - 1½	200 - 40	219,1 - 1½	298	137	86	244	53	M16x90	130 - 170	2,64	GMDX	UL	FM
GMDR	GMDG	8 - 2	200 - 50	219,1 - 2	298	137	98	244	64	M16x90	130 - 170	2,72	GMDX	UL	FM
GMDR	GMDG	8 - 2½	200 - 65	219,1 - 2½	298	137	115	244	79	M16x90	130 - 170	2,82	GMDX	UL	FM
GMDR	GMDG	8 - 3	200 - 80	219,1 - 3	298	139	128	244	92	M16x90	130 - 170	2,94	GMDX	UL	FM
GMDR	GMDG	8 - 4	200 - 100	219,1 - 4	298	154	156	244	114	M16x90	130 - 170	3,97	GMDX	UL	FM
GMDR	GMDG	10 - 1	250 - 25	273,0 - 1	372	168	75	300	38	M20x110	180 - 220	4,10	GMDX		
GMDR	GMDG	10 - 1¼	250 - 32	273,0 - 1¼	372	168	82	300	46	M20x110	180 - 220	4,48	GMDX		
GMDR	GMDG	10 - 1½	250 - 40	273,0 - 1½	372	168	86	300	53	M20x110	180 - 220	4,53	GMDX		
GMDR	GMDG	10 - 2	250 - 50	273,0 - 2	372	168	100	300	64	M20x110	180 - 220	4,68	GMDX	UL	FM
GMDR	GMDG	10 - 2½	250 - 65	273,0 - 2½	372	168	115	300	79	M20x110	180 - 220	5,58	GMDX	UL	FM
GMDR	GMDG	10 - 3	250 - 80	273,0 - 3	372	169	128	300	92	M20x110	180 - 220	5,02	GMDX	UL	FM
GMDR	GMDG	10 - 4	250 - 100	273,0 - 4	372	182	160	300	114	M20x110	180 - 220	6,31	GMDX		

Material specifications

Housing: ductile iron conform to ASTM A536 Grade 65-45-12 (EN-GJS-450-10).

Coating:

- Hot dip galvanised.
- Red paint coating RAL 3000, epoxy powder coating (any other colour on request).

Bolts and nuts:

- Medium carbon steel, zinc electroplated, quenched and tempered (ASTM A183/ISO 898).

For additional details we refer to our separate bolts & nuts datasheet.

Rubber gasket: standard delivered with EPDM Grade E gasket, manufactured from compounds meeting applicable ASTM D2000 requirements. NBR can be ordered separately.

GASKET COMPOUND GRADE	REFERENCE CATALOGUE ITEM	TEMPERATURE RANGE (°C)	MEDIUM					
			Cold Water	Hot water	Air (oil-free)	Nitrogen	Glycol/ water mixtures	Air (with oil vapor)
EPDM	GMG, GST, GMD, GSTFC	-40°C / +110°C	✓	✓	✓	✓	✓	
NBR-TL	GKS, GKF, GKA, GMD, GSTFC	-29°C / +83°C				✓		✓
NBR-TL	GKS, GKF, GKA, GMD, GSTFC	-29°C / +63°C	✓	✓	✓			
NBR-TL	GKS, GKF, GKA, GMD, GSTFC	-29°C / +20°C					✓	

Applications

- **Fire protection systems (water-based):**

Wet, dry, deluge and pre-action sprinkler systems in accordance with FM / UL approvals and applicable standards.

- **HVAC and building services:**

Heating, cooling, and glycol-based systems.

- **Industrial applications:**

Compressed air, exhaust, drainage and other piping systems.

Working pressure

- **Sprinkler applications (water-based fire protection systems):**

Maximum working pressure 2,07 MPa / 20,7 bar / 300 psi, in accordance with applicable product certifications (e.g. FM, UL) and system standards (e.g. NFPA 13, EN 12845, APSAD).

- **Other media and non-sprinkler applications:**

The allowable working pressure depends on the fluid group and application and shall be determined in accordance with Directive 2014/68/EU (PED) and applicable technical documentation (available on Profit website CSTB certifications).

These products are typically classified under Article 4(3) (Sound Engineering Practice - SEP) and are not CE-marked.

The applicable PED category depends on system parameters and must be verified by the system designer.

These products are not intended for use with gases classified in Group 1 (hazardous media according to PED).

Such applications fall outside the scope of this datasheet.

- **Vacuum resistance (all media except gas group 1):**

Suitable for vacuum applications. Tested down to -0,85 bar(g) in according to FM1920.

For design purposes, a conservative limit of -0,55 bar(g) is recommended.

Approvals

- Sprinkler-specific:



- Other qualifications:



- KOMO® (KIWA):**

A quality mark that guarantees the quality, integrity and compliance with building regulations of products, processes, and services within the construction and infrastructure sectors for cold & hot non-drinking water applications up to 110°C. The certification is based on BRL 2013 and EN 681-1 standards.

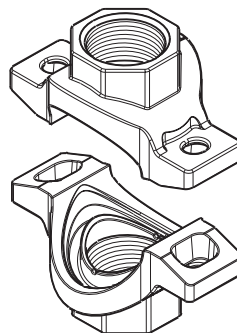
Threads

- Standard: BSPT thread (ISO 7-1 / EN10226).
- Available with NPT thread on request (ANSI / ASME B1.20.1).

LABEL EXAMPLE

Mechanical tee GMD (Threaded)	
2-11/4	3-11/4
2-11/2	4-11/4
21/2-11/4	6-11/4
Hole cut dimension 46(+1mm)	

- * Please note that the **correct hole cut dimension** is mentioned:
- on the label which is attached to the product itself
 - on the document called 'Hole cut dimensions', which is added to each delivery from our warehouse Piping Logistics, Belgium. This document is attached to the outside of the first box in a plastic pouch with reference 'Documents enclosed'



Mechanical cross** conversion				
	Main pipe diameter		Maximum outlet mechanical cross	
Inch	DN	OD	DN	OD
2½	65	76,1	32	42,4
3	80	88,9	40	48,3
4	100	114,3	50	60,3
5	125	139,7	65	76,1
6	150	168,3	80	88,9
8	200	219,1	100	114,3
10	250	273,0	100	114,3

**Mechanical cross not FM and UL certified.

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 pressurised 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).



- Profit paint coated products are intended for piping with category C1 and C2 environment (indoor). For installations in category C3 we advise the use of our hot dip galvanised couplings and fittings. For application in corrosivity category C4 (higher salinity climate) or higher, please contact info@pipinglogistics.eu. (Classification according to ISO 9223)
- Pressure ratings listed for fire sprinkler applications are CWP (cold working pressure) or MWP (maximum working pressure) at a maximum service temperature of 66°C. This rating may occasionally differ from maximum working pressure listed and / or approved by UL and / or FM, as testing conditions and test pipes can differ. For more information, please contact info@pipinglogistics.eu.
- Maximum working pressure listed is the total of internal and external pressures based on standard weight (ANSI) steel pipe and standard roll or cut groove in accordance with Profit specifications. For more information, please contact info@pipinglogistics.eu.
- For more information on allowed pressures and temperatures related to HVAC applications please contact info@pipinglogistics.eu.
- For a onetime commissioning test only, the maximum joint working pressure may be increased to 150% of the working pressure.
- Independent technical datasheet for bolts & nuts and rubber gaskets.

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
28/09/2026		New design.