## Crafted for efficiency, designed for longevity.



### Rubber Puddle Flanges (RPF)

YTM Makina puddle flanges, watertight up to 10 bar and easy to install, are crafted for secure pipeline integration in concrete walls, tanks, shafts, foundation plates, manholes, and basements, ensuring a pressure-tight fit.



Puddle flanges are suitable for all standard pipes in steel, plastic, stoneware, concrete and cast iron from 20 to 3200mm OD.

Our products are expertly engineered to facilitate the pressure-tight embedding of pipelines within concrete walls, foundation plates, and manholes, offering robust resistance up to 10 bar. This design effectively blocks the entry of pressurized water, as well as diffusing substances like gases (for instance, radon) and hydrocarbons (such as oil and petrol), ensuring optimal protection and performance in critical infrastructure applications.



Size Range Material Steel Tightening Torque Pressure Rating

Constant Working Temperature Range

20mm >

EPDM Rubber (also available in NBR)
1.4301 (304) Stainless Steel /1.4401 (316)
6Nm (20 - 500mm)
20-559mm10bar/145psi
560mm> 8bar/116psi

*-10° to 60° (-50° to 140° intemittent)* 

#### **Applications:**

- Prevents water or gas intrusion through pipe penetrations in residential and commercial buildings.
- Compatible with smooth-walled pipes, requiring clean and flawless surfaces at the installation point.
- Accommodates pipe diameters from 20mm to 3200mm.
- Ideal for construction-phase installation to block water penetration.

#### **Benefits:**

- Proven performance under water pressures up to 10 bar.
- Simplified installation process, offering an economical solution.
- Versatile application possibilities, including installation in walls, floors, and ceilings.
- Exhibits strong resistance to a broad range of chemical exposures.

Density	1,030kg/m <sup>3</sup>
Shore hardness	40° Sh ± 3
Tensile Strength	10 N/mm <sup>2</sup>
Elongation at fracture	750%
Tear propagation strength	3.9 N/mm <sup>2</sup>
Deformation under pressure (72h, 70°C)	32%

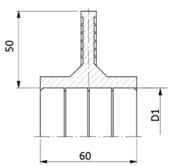
#### **Notes:**

- Puddle flanges are provided with an inner diameter (ID) that is smaller than the outer diameter (OD) of the host pipe, requiring stretching for installation.
- A minimum concrete coverage of 50mm is recommended on each side of the puddle flange, utilizing waterproof concrete for optimal protection.
- The outer diameter (OD) of puddle flanges typically exceeds the host pipe's OD by 75-100mm, varying with the flange size.
- It is essential that the pipe be adequately supported throughout the concrete pouring process, as puddle flanges do not offer axial support or restraint.

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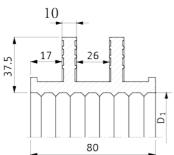


### **Product Range**



20-354mm 10 bar pressure rating Supplied with 2 x SS tension bands.

Reference	D1	Range (Pipe O/D)		
	DI	From (mm)	To (mm)	
RPF20	16	18	24	
RPF25	21	23	29	
RPF32	29	31	37	
RPF40	38	40	46	
RPF50	48	50	56	
RPF63	60	62	69	
RPF75	71	73	82	
RPF90	84	86	97	
RPF100	95	98	109	
RPF110	105	108	121	
RPF125	120	123	136	
RPF145	132	136	155	
RPF160	154	158	177	
RPF180	173	177	197	
RPF200	195	199	224	
RPF225	215	220	249	
RPF250	245	250	279	
RPF280	275 280		314	
RPF315	310	315	354	



355-559mm 10 bar pressure rating Supplied with 3 x SS tension bands.

Reference	D1	Range (Pipe O/D)		
		From (mm)	To (mm)	
RPF355	310	355	399	
RPF400	353	400	449	
RPF450	400	450	499	
RPF500	448	500	559	

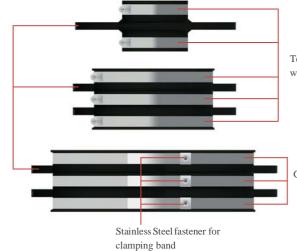
#### 560mm >

8 bar pressure rating

Supplied with clamping band (30m roll) and 3 x SS fasteners. Clamping tool supplied separately.

Reference	D1	Clamping Band Length	Range (Pipe O/D)	
		(per puddle flange) (m)	From (mm)	To (mm)
RPF560	505	12.3	560	629
RPF630	571	13.8	630	709
RPF710	648	16.2	710	799
RPF800	733	17.1	800	899
RPF900	828	18.0	900	999
RPF1000	923	19.8	1000	1150
RPF1200	1113	23.7	1200	1350
RPF1400	1303	28.0	1400	1550
RPF1600	1490	31.9	1600	1750
RPF1800	1680	38.0	1800	1990

Larger sizes available on request



Puddle Flange Tension bands with worm drive



355mm > Puddle flange