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**SPECS &  
INFORMATION**

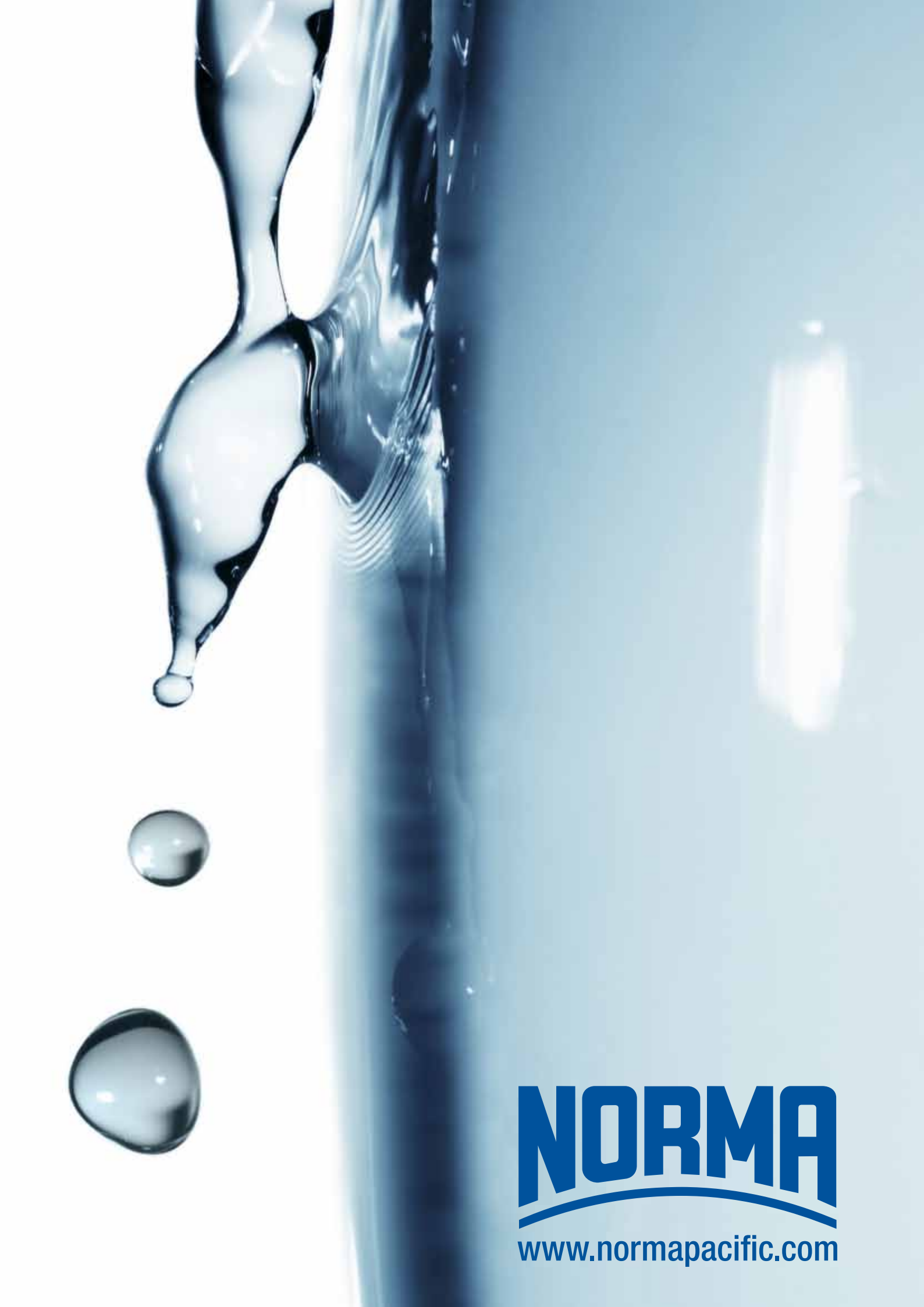
# NORMA

CATALOGUE ISSUE I

## Push Fit COMPRESSION FITTINGS

[www.normapacific.com](http://www.normapacific.com)





**NORMA**  
[www.normapacific.com](http://www.normapacific.com)

# Contents

- 4 CERTIFICATIONS
- 5 PRODUCT PORTFOLIO
- 6 PUSH FIT COMPRESSION FITTINGS SUMMARY
- 7 INSTALLATION INSTRUCTIONS & ABBREVIATIONS
  
- 8 PRODUCT RANGE**
- 9 PUSH FIT PP MALE THREADED ADAPTOR (MA)
- 10 PUSH FIT PP FEMALE THREADED ADAPTOR (FA)
- 11 PUSH FIT PP MALE THREADED TEE (MT)
- 12 PUSH FIT PP FEMALE THREADED TEE (FT)
- 13 PUSH FIT PP MALE THREADED ELBOW - MALE BEND 90 (MB)
- 14 PUSH FIT PP FEMALE THREADED ELBOW - FEMALE BEND 90 (FB)
- 15 PUSH FIT PP STRAIGHT COUPLER (SC)
- 16 PUSH FIT PP EQUAL BEND (EB)
- 17 PUSH FIT PP EQUAL TEE (ET)
- 18 PUSH FIT PP END CAP (EC)
- 19 PUSH FIT PP REDUCING COUPLER (RC)
- 20 PUSH FIT PP REDUCING TEE (RT)
- 21 PUSH FIT PP FLANGE ADAPTOR (FLA)
- 22 PUSH FIT PP POP-UP EQUAL BEND (PE)
- 22 PUSH FIT PP WALL PLATE ELBOW (WPE)
- 23 PUSH FIT COMPRESSION FITTINGS WITH BRASS INSERTS**
- 23 PUSH FIT PP MALE THREADED ADAPTOR WITH BRASS INSERT (MAB)
- 23 PUSH FIT PP FEMALE THREADED ADAPTOR WITH BRASS INSERT (FAB)
- 23 PUSH FIT PP FEMALE THREADED BEND WITH BRASS INSERT (FBB)
  
- 24 ADDITIONAL INFORMATION**
- 24 MANUFACTURER'S REFERENCE



# CERTIFICATIONS



Our quality assurance program is documented in an approved quality assurance manual and covers all manufacturer, sales and services procedures. Stringent control of dimension and mechanical properties, starting from the raw material and following right through all production steps to laboratory testing, as the final product is examined in order to maintain the high quality of products.

## Material Control System

This system controls the quality of all incoming material. The incoming material specifications are co-related with Raw Material test certificates of the material and the checks are documented.

## In-process Testing and Inspection System

This system controls the quality of the entire products during production. Each batch of the products are subjected to testing and inspection. Testing and inspection is performed in accordance with specification standard requirements. Test and online inspection data is evaluated by the QA/QC department and recorded in an appropriate format.

## Control of inspection, measuring and test equipment

All the inspection and testing equipment are calibrated periodically to maintain their accuracy.

## Final inspection

The outgoing products are checked by QC to ensure the high quality of products before delivery.

## MEETS REQUIREMENTS OF:



AS4020, AS/NZS 4129, BS5114, ISO14236



Certificate No: WMK25742





NORMA Pacific is a member of the NORMA Group – the world leader in engineered joining technology. Our strengths lie in our high quality, broad and innovative product portfolio which enables us to be a leading supplier for the irrigation, industrial and automotive markets. Our regional and international presence, combined with decades of know-how, contributes to our customers' success and overall satisfaction.

As with all NORMA ranges, you can rest assured that each product is of superior design and manufacturing excellence. We continuously test, evaluate and improve each one of our products ensuring exceptional performance that is second to none. We'll be sure to find the optimal solution for your requirement - be it an individual component or a complete system.

## PRODUCT PORTFOLIO



### ENGINEERED JOINING TECHNOLOGY

Under the banner of engineered joining technology, our high quality products include:

- NORMACLAMP® - Hose clamping products
- NORMAFIX® - Fixing and retaining products
- NORMACONNECT® - Pipe connecting and joining
- NORMAPLAST® - Plastic connectors (push fit and threaded)



We can also design a customised joining solution specific to your connecting needs for an array of industry applications. In addition to the NORMA brand, our other brands include Breeze®, ABA®, Serflex®, Terry®, R.G Ray®, Torca® and Serratub®.



### PUMPS

Our Pumpmaster® brand is a leading supplier of high quality water pumps, pressure tanks and accessories built specifically for industrial, commercial, domestic and rural requirements. Our broad range of products include the following:

- Domestic high pressure systems
- Crossover systems and controllers
- High performance water pressure pumps
- Stainless Steel pumps
- Cast Iron pumps
- Deep well jet pumps
- Borehole submersible water pumps
- Fire pumps
- Vertical multi-stage
- High pressure engine drive water pumps
- Petrol and Diesel powered engine drive pumps
- Engine trash pumps
- Fibreglass pressure tanks
- Drainage and sewerage pumps
- Accessories for water pump systems and water pressure tanks



### TAPPING FERRULES AND TAPPING SADDLES

The NORMA range of Tapping Ferrules and Tapping Saddles - for wet, under pressure pipe tapping providing a more effective and time efficient installation.

- Durable, high impact strength materials
- Wide range of sizes and types
- Meet international and Australian standards (ISO/BS/AS/NZ/MS/DIN)
- UV Resistant Co-Polymer material



Note: Nuts specifically for recycled water (lilac coloured) are available upon request.



# PUSH FIT COMPRESSION FITTINGS

Our wide range of NORMA push fit compression fittings ensure fast and safe connections of poly pipe for all your industrial, commercial and domestic needs.

- Push fit - No need to remove nut
- Quick assembly
- Durable, high impact strength materials
- Pipe backstop prevents over insertion
- Built-in anti pipe rotation wedges
- Wide range of sizes and types
- UV Resistant
- Approved for potable water applications
- Meets international standards (ISO/BS/ASNZ/MS/DIN)

Note: Nuts specifically for recycled water (lilac coloured) are available upon request.

## HOW TO UNDERSTAND NORMA POLY FITTING CODES

This is an example of a NORMA Metric joiner: 20mm X 20mm

BRAND	TYPE	SIZE	
NM = NORMA METRIC NR = NORMA RURAL	0 Line end	1 15mm	1/2"
	1 Joiner	2 20mm	3/4"
	2 End connector (PE x Male BSP)	3 25mm	1"
	3 Tee (PE x PE x PE)	4 32mm	1 1/4"
	4 Tee (PE x Female BSP)	5 40mm	1 1/2"
	5 Elbow (PE x PE)	6 50mm	2"
	6 Elbow (PE x Female BSP)	7 63mm	2 1/2"
	7 Elbow (PE x Male BSP)	8 75mm	3"
	8 End connector (PE x Female BSP)	9 90mm	3 1/2"
	9 Tee (PE x Male BSP)	0 110mm	4"

## COMPONENTS OF COMPRESSION FITTINGS

ITEM	NAME OF PART	MATERIAL
1	BODY	CO-POLYMER
2	RUBBER 'O' RING	NITRILE BUTADIENE RUBBER
3	HOLDER	CO-POLYMER
4	CLINCHING RING	ACETAL
5	LOCKING NUT	CO-POLYMER



# INSTALLATION INSTRUCTIONS

1. Cut the pipe square with a proper pipe cutter. Clean the burr at the pipe end. ....



2. Mark the insertion depth on the pipe for reference. ....



3. Loosen the locking nut by one or two threads without removing the locking nut, insert the pipe into the fitting to the correct depth. ....



4. The locking nut can be tightly fastened by hand. ....



5. Tighten the fitting with a tool or strap until the locking nut is screwed past the last thread. ....



## ABBREVIATIONS

- D = Internal diameter
- DN = Nominal Diameter
- G = Thread size (BSP)
- GM = Grams
- mm = Millimetres
- OD = Outside diameter
- PC = Piece

## INSERTION TABLE

PIPE OD (mm)	INSERTION DEPTH (mm)
20	50
25	65
32	70
40	80
50	90
63	100
75	106
90	130
110	155



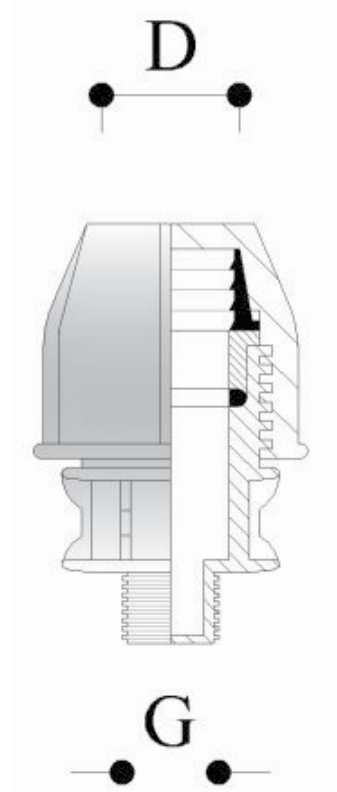


**NORMA**

**Push Fit**  
**COMPRESSION**  
**FITTINGS**  
**PRODUCT RANGE**

# PUSH FIT PP MALE THREADED ADAPTOR (MA)

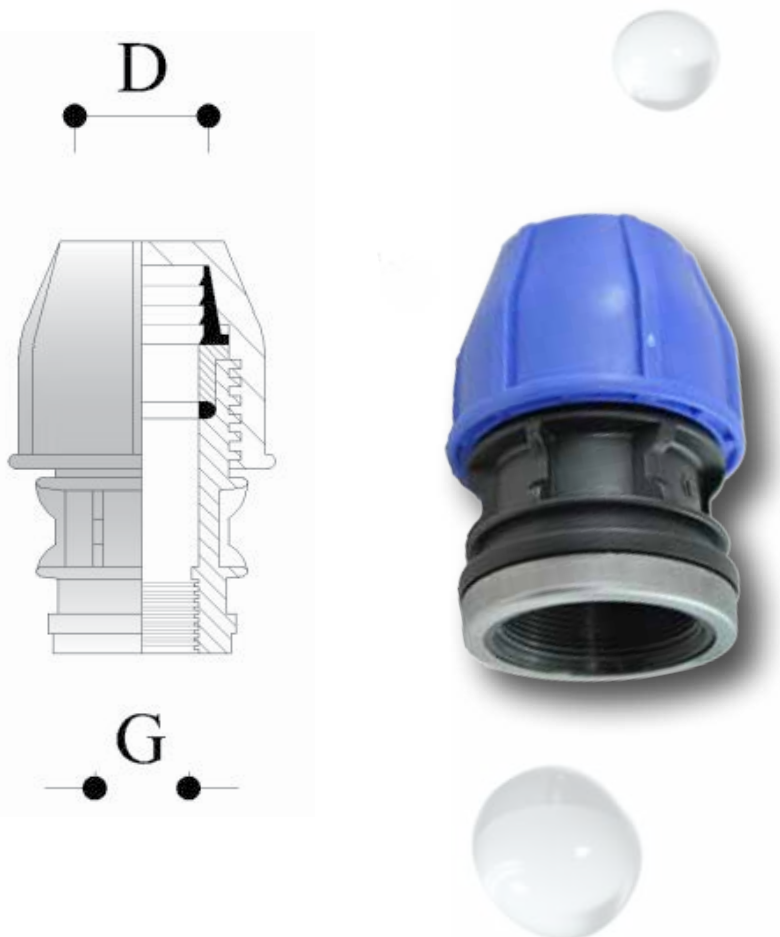
LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x G / mm	WEIGHT	PACKING
				GM / PC	BOX
NM221	90-MA-513	0796 2650 271	20 x 1/2"	38	400
NM222	90-MA-514	0796 2650 272	20 x 3/4"	39	400
NM223	90-MA-500	0796 2650 270	20 X 1"	44	400
NM231	90-MA-515	0796 2650 273	25 x 1/2"	59	250
NM232	90-MA-516	0796 2650 274	25 x 3/4"	59	250
NM233	90-MA-517	0796 2650 276	25 X 1"	63	250
NM241	90-MA-572	0796 2650 290	32 X 1/2"	86	160
NM242	90-MA-518	0796 2650 278	32 X 3/4"	87	160
NM243	90-MA-519	0796 2650 279	32 X 1"	90	160
NM244	90-MA-585	0796 2650 291	32 X 1 1/4"	94	160
NM252	90-MA-559	0796 2650 289	40 X 3/4"	150	100
NM253	90-MA-520	0796 2650 281	40 X 1"	155	100
NM254	90-MA-521	0796 2650 282	40 X 1 1/4"	156	100
NM255	90-MA-522	0796 2650 283	40 X 1 1/2"	163	100
NM264	90-MA-528	0796 2650 286	50 X 1 1/4"	237	50
NM265	90-MA-526	0796 2650 284	50 X 1 1/2"	240	50
NM266	90-MA-527	0796 2650 285	50 X 2"	244	50
NM275	90-MA-530	0796 2650 287	63 X 1 1/2"	346	32
NM276	90-MA-531	0796 2650 288	63 X 2"	347	32
NM286	90-MA-532	0796 2640 066	75 X 2"	500	25
NM287	90-MA-533	0796 2640 067	75 X 2 1/2"	513	25
NM298	90-MA-537	0796 2640 068	90 X 3"	799	16
NM200	90-MA-569	0796 2640 069	110 X 4"	1292	8



# PUSH FIT PP FEMALE THREADED ADAPTOR (FA)

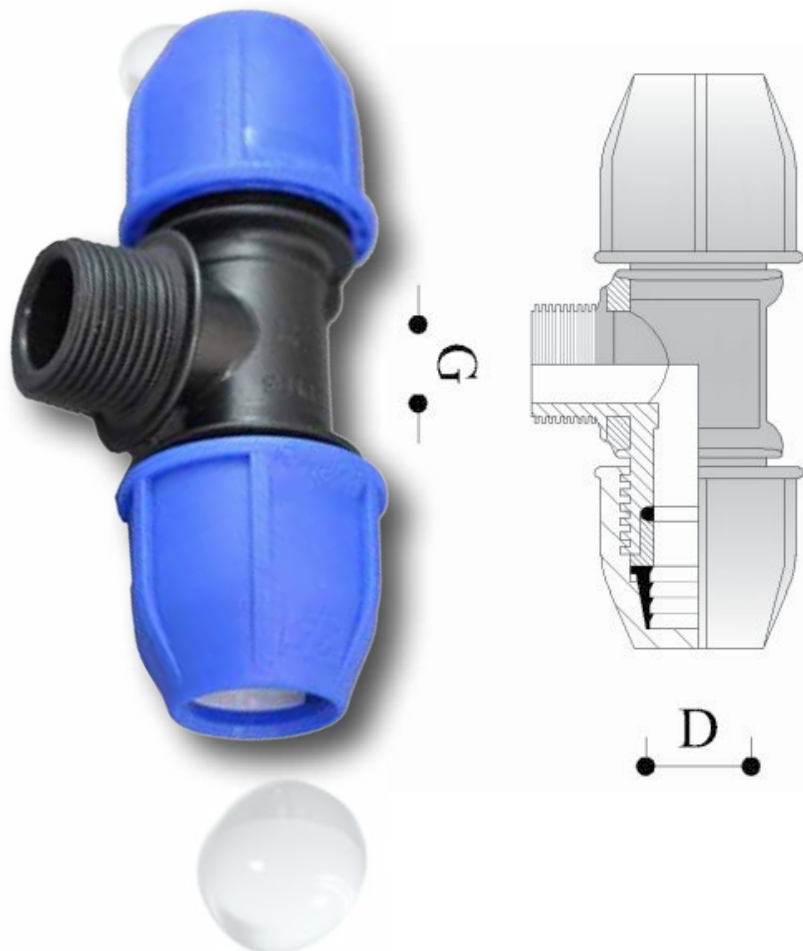
LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x G / mm	WEIGHT (approx)	PACKING
				GM / PC	BOX
NM821	90-FA-513R	0796 2650 194	20 x 1/2"	38*	400
NM822	90-FA-514R	0796 2650 196	20 x 3/4"	41	400
NM831	90-FA-515R	0796 2650 198	25 X 1/2"	62	250
NM832	90-FA-516R	0796 2650 201	25 x 3/4"	62	250
NM833	90-FA-517R	0796 2650 204	25 x 1"	66	250
NM842	90-FA-518R	0796 2650 206	32 x 3/4"	91	160
NM843	90-FA-519R	0796 2650 208	32 x 1"	95	160
NM844	90-FA-585R	0796 2650 382	32 x 1 1/4"	108	160
NM853	90-FA-520R	0796 2650 210	40 x 1"	163	100
NM854	90-FA-521R	0796 2650 376	40 x 1 1/4"	164	100
NM855	90-FA-522R	0796 2650 377	40 x 1 1/2"	171	80
NM865	90-FA-526R	0796 2650 378	50 x 1 1/2"	252	50
NM866	90-FA-527R	0796 2650 379	50 x 2"	286	50
NM875	90-FA-530R	0796 2650 380	63 x 1 1/2"	413	32
NM876	90-FA-531R	0796 2650 381	63 x 2"	364	32
NM886	90-FA-532R	0796 2640 103	75 x 2"	525	25
NM887	90-FA-533R	0796 2640 104	75 x 2 1/2"	539	25
NM898	90-FA-537R	0796 2640 105	90 x 3"	839	16
NM800	90-FA-569R	0796 2640 106	110 x 4"	1357	8

\* No reinforcement cap for 20 x 1/2" size.



# PUSH FIT PP MALE THREADED TEE (MT)

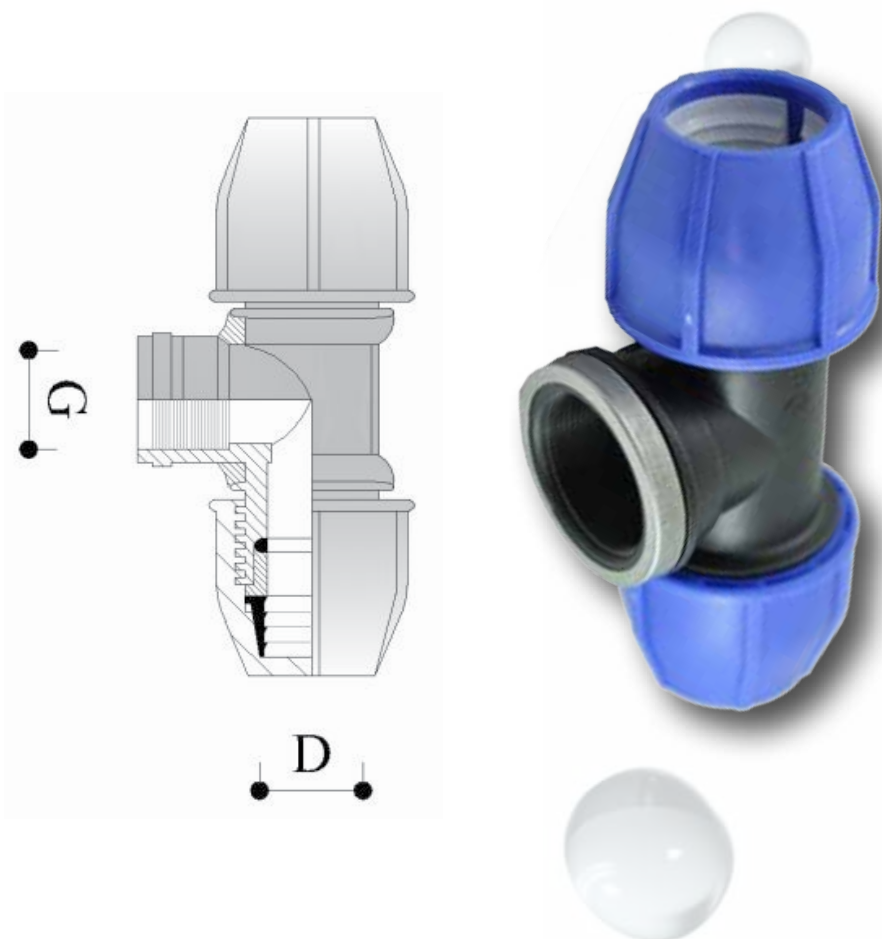
LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x G / mm	WEIGHT	PACKING
				GM / PC	BOX
NM921	90-MT-513	0796 2650 306	20 x 1/2"	38	400
NM922	90-MT-514	0796 2650 307	20 x 3/4"	39	400
NM931	90-MT-515	0796 2650 308	25 X 1/2"	59	250
NM932	90-MT-516	0796 2650 309	25 x 3/4"	59	250
NM933	90-MT-517	0796 2650 310	25 x 1"	63	250
NM942	90-MT-518	0796 2650 311	32 x 3/4"	86	160
NM943	90-MT-519	0796 2650 312	32 x 1"	87	160
NM953	90-MT-520	0796 2650 313	40 x 1"	90	160
NM954	90-MT-521	0796 2650 314	40 x 1 1/4"	94	160
NM964	90-MT-528	0796 2650 316	50 x 1 1/4"	150	100
NM965	90-MT-526	0796 2650 315	50 x 1 1/2"	494	100
NM976	90-MT-531	0796 2650 317	63 x 2"	761	100
NM986	90-MT-532	0796 2640 074	75 x 2"	1073	100
NM987	90-MT-533	0796 2640 075	75 x 2 1/2"	1168	50
NM998	90-MT-537	0796 2640 076	90 x 3"	1824	50
NM900	90-MT-569	0796 2640 077	110 x 4"	2808	50



# PUSH FIT PP FEMALE THREADED TEE (FT)

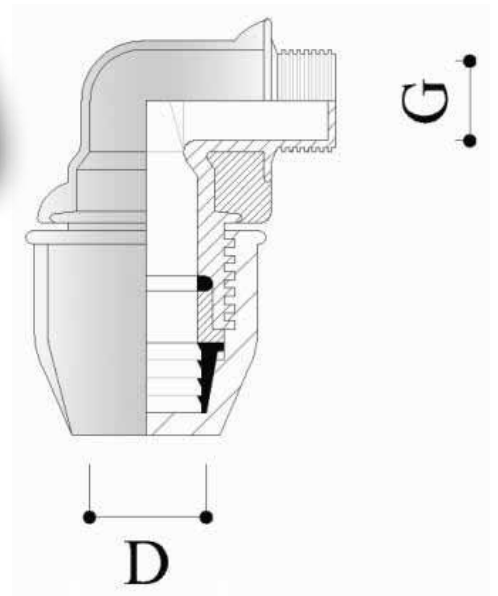
LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x G / mm	WEIGHT (approx)	PACKING
				GM / PC	BOX
NM421	90-FT-513R	0796 2650 247	20 x 1/2"	82*	160
NM422	90-FT-514R	0796 2650 249	20 x 3/4"	88	160
NM431	90-FT-515R	0796 2650 251	25 x 1/2"	129	100
NM432	90-FT-516R	0796 2650 253	25 x 3/4"	132	100
NM433	90-FT-517R	0796 2650 255	25 x 1"	143	100
NM442	90-FT-518R	0796 2650 257	32 x 3/4"	196	64
NM443	90-FT-519R	0796 2650 259	32 x 1"	204	64
NM444	90-FT-585R	0796 2650 397	32 x 1 1/4"	205	64
NM453	90-FT-520R	0796 2650 261	40 x 1"	349	32
NM454	90-FT-521R	0796 2650 263	40 x 1 1/4"	347	32
NM455	90-FT-522R	0796 2650 392	40 X 1 1/2"	359	32
NM465	90-FT-526R	0796 2650 393	50 x 1 1/2"	532	24
NM466	90-FT-527R	0796 2650 394	50 X 2"	570	24
NM475	90-FT-530R	0796 2650 395	63 X 1 1/2"	796	15
NM476	90-FT-531R	0796 2650 396	63 x 2"	846	15
NM487	90-FT-533R	0796 2640 110	75 x 2 1/2"	1171	10
NM498	90-FT-537R	0796 2640 111	90 x 3"	1822	6
NM400	90-FT-569R	0796 2640 112	110 x 4"	3135	3

\* No reinforcement cap for 20 x 1/2" size.



# PUSH FIT PP MALE THREADED ELBOW - MALE BEND 90 (MB)

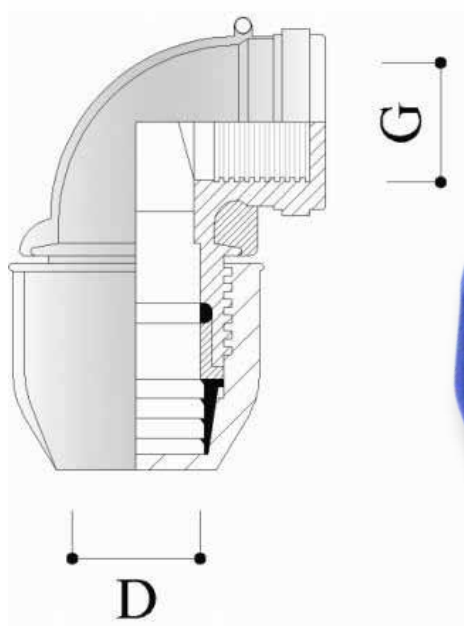
LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x G / mm	WEIGHT	PACKING
				GM / PC	BOX
NM721	90-MB-513	0796 2650 292	20 x 1/2"	42	300
NM722	90-MB-514	0796 2650 293	20 x 3/4"	45	300
NM731	90-MB-515	0796 2650 294	25 X 1/2"	65	200
NM732	90-MB-516	0796 2650 295	25 x 3/4"	68	200
NM733	90-MB-517	0796 2650 296	25 x 1"	76	200
NM742	90-MB-518	0796 2650 297	32 x 3/4"	97	120
NM743	90-MB-519	0796 2650 298	32 x 1"	107	120
NM753	90-MB-520	0796 2650 299	40 x 1"	164	64
NM754	90-MB-521	0796 2650 300	40 x 1 1/4"	186	64
NM755	90-MB-522	0796 2650 301	40 x 1 1/2"	191	64
NM764	90-MB-528	0796 2650 304	50 x 1 1/4"	285	40
NM765	90-MB-526	0796 2650 302	50 x 1 1/2"	285	40
NM766	90-MB-527	0796 2650 303	50 x 2"	308	40
NM776	90-MB-531	0796 2650 305	63 x 2"	410	24
NM786	90-MB-532	0796 2640 070	75 x 2"	619	16
NM787	90-MB-533	0796 2640 071	75 x 2 1/2"	616	16
NM798	90-MB-537	0796 2640 072	90 x 3"	997	10
NM700	90-MB-569	0796 2640 073	110 x 4"	1696	6



# PUSH FIT PP FEMALE THREADED ELBOW - FEMALE BEND 90 (FB)

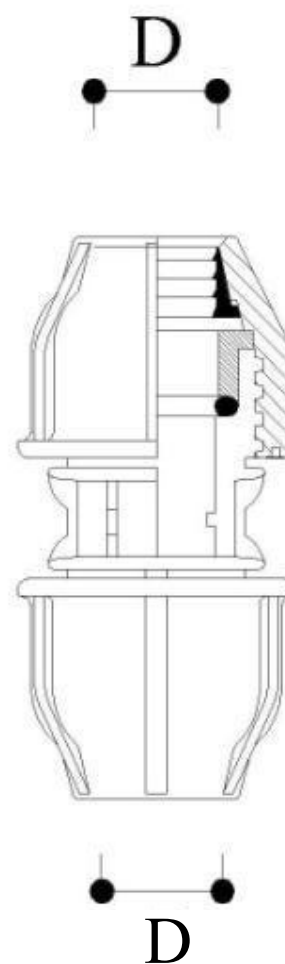
LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x G / mm	WEIGHT (approx)	PACKING
				GM / PC	BOX
NM621	90-FB-513R	0796 2650 219	20mm x 1/2"	48*	300
NM622	90-FB-514R	0796 2650 222	20mm x 3/4"	55	300
NM631	90-FB-515R	0796 2650 224	25mm x 1/2"	70	200
NM632	90-FB-516R	0796 2650 227	25mm x 3/4"	75	200
NM633	90-FB-517R	0796 2650 229	25mm x 1"	82	200
NM641	90-FB-572R	0796 2650 390	32mm x 1/2"	113	120
NM642	90-FB-518R	0796 2650 231	32mm x 3/4"	116	120
NM643	90-FB-519R	0796 2650 234	32mm x 1"	119	120
NM644	90-FB-585R	0796 2650 391	32mm x 1 1/4"	129	120
NM653	90-FB-520R	0796 2650 236	40mm x 1"	187	64
NM654	90-FB-521R	0796 2650 383	40mm x 1 1/4"	196	64
NM655	90-FB-522R	0796 2650 384	40mm x 1 1/2"	212	64
NM664	90-FB-528R	0796 2650 387	50mm x 1 1/4"	277	40
NM665	90-FB-526R	0796 2650 385	50mm x 1 1/2"	298	40
NM666	90-FB-527R	0796 2650 386	50mm X 2"	339	40
NM675	90-FB-530R	0796 2650 388	63mm x 1 1/2"	439	24
NM676	90-FB-531R	0796 2650 389	63mm x 2"	465	24
NM687	90-FB-533R	0796 2640 107	75mm x 2 1/2"	673	16
NM698	90-FB-537R	0796 2640 108	90mm x 3"	1113	10
NM600	90-FB-569R	0796 2640 109	110mm x 4"	1889	6

\* No reinforcement cap for 20 x 1/2" size.



# PUSH FIT PP STRAIGHT COUPLER (SC)

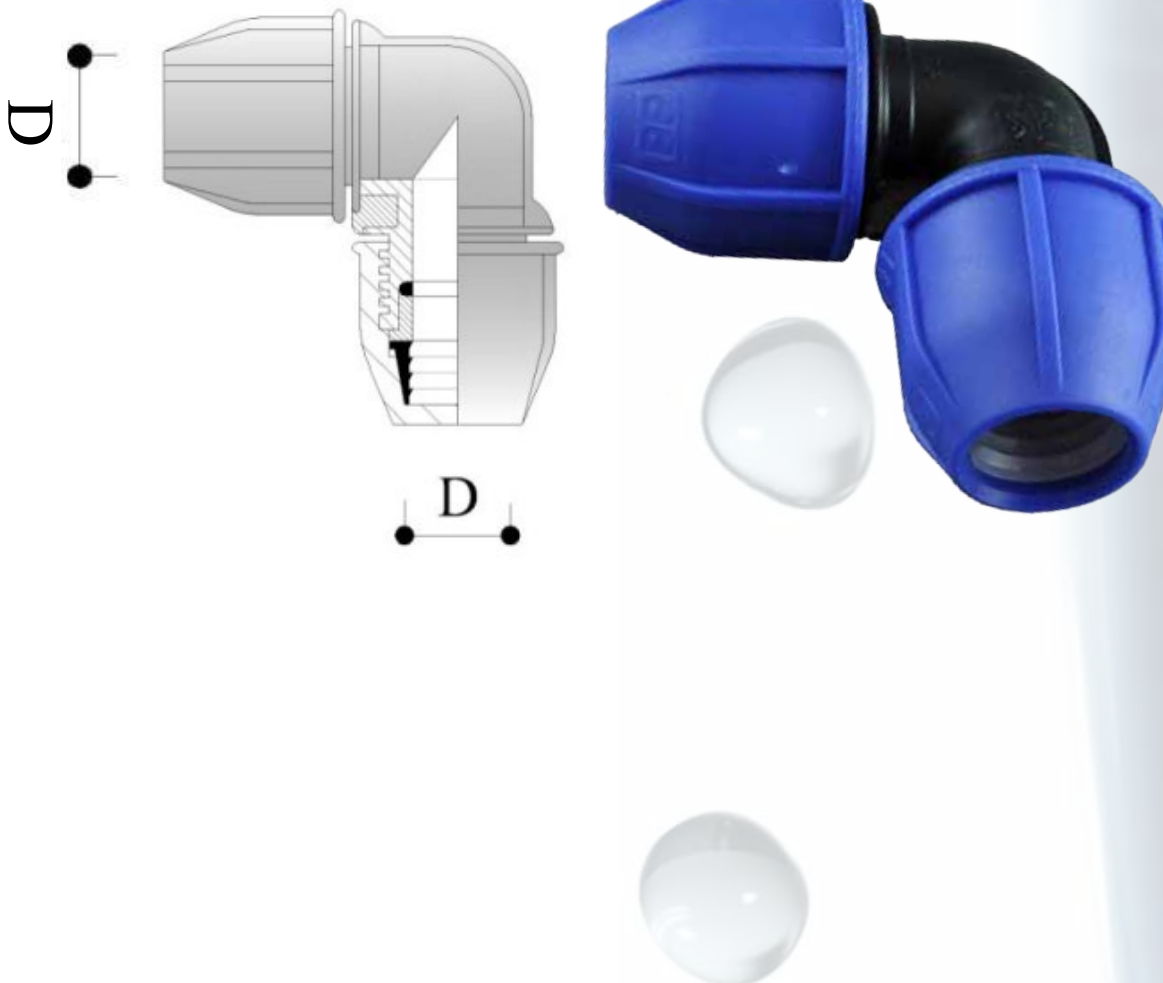
LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x D / mm	WEIGHT	PACKING
				GM / PC	BOX
NM122	90-SC-311	0796 2650 343	20	65	250
NM133	90-SC-312	0796 2650 344	25	102	150
NM144	90-SC-313	0796 2650 345	32	155	100
NM155	90-SC-314	0796 2650 346	40	274	50
NM166	90-SC-315	0796 2650 347	50	417	32
NM177	90-SC-316	0796 2650 348	63	610	20
NM188	90-SC-317	0796 2640 090	75	886	14
NM199	90-SC-318	0796 2640 091	90	1374	12
NM100	90-SC-319	0796 2640 092	110	2206	5





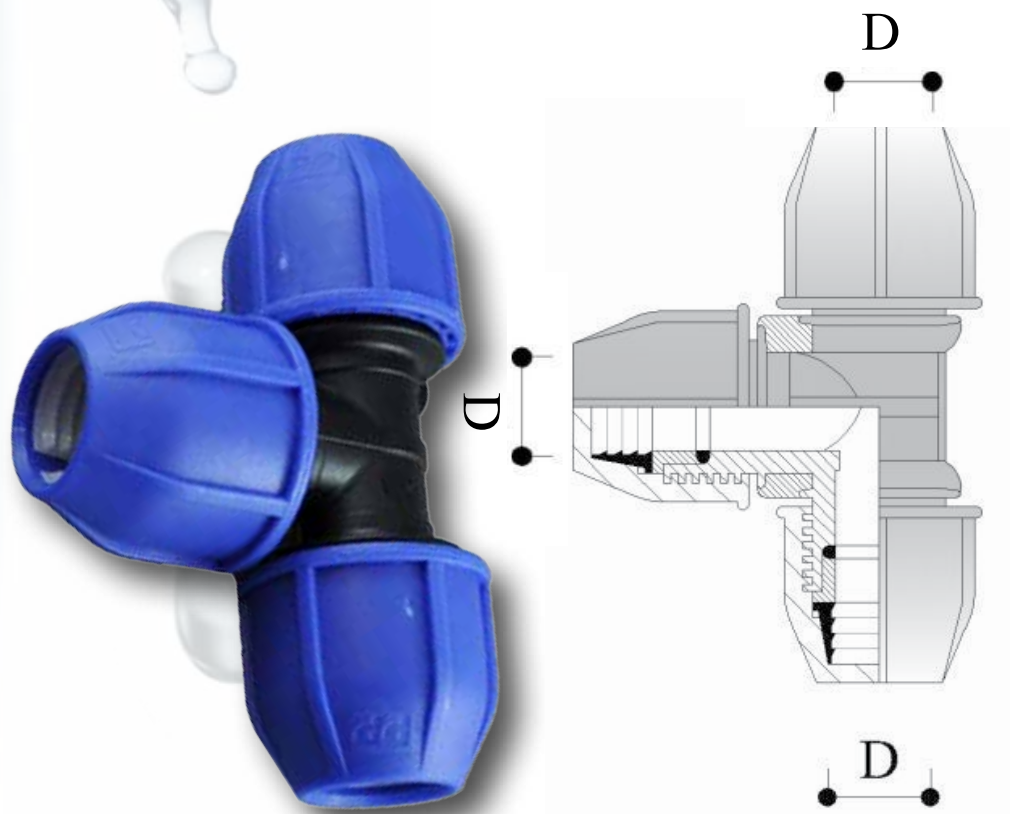
# PUSH FIT PP EQUAL BEND (EB)

LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x D / mm	WEIGHT	PACKING
				GM / PC	BOX
NM522	90-EB-311	0796 2650 175	20	71	250
NM533	90-EB-312	0796 2650 176	25	112	150
NM544	90-EB-313	0796 2650 177	32	173	80
NM555	90-EB-314	0796 2650 178	40	297	50
NM566	90-EB-315	0796 2650 179	50	459	32
NM577	90-EB-316	0796 2650 180	63	715	15
NM588	90-EB-317	0796 2640 047	75	1008	12
NM599	90-EB-318	0796 2640 048	90	1590	8
NM500	90-EB-319	0796 2640 049	110	2523	4



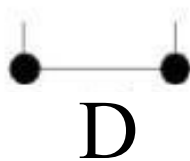
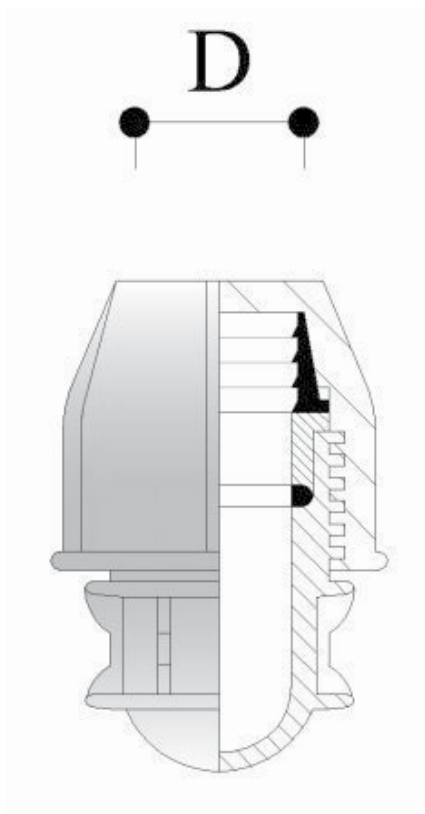
# PUSH FIT PP EQUAL TEE (ET)

LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x D X D / mm	WEIGHT	PACKING
				GM / PC	BOX
NM322	90-ET-311	0796 2650 187	20	106	150
NM333	90-ET-312	0796 2650 188	25	164	100
NM344	90-ET-313	0796 2650 189	32	253	50
NM355	90-ET-314	0796 2650 190	40	440	32
NM366	90-ET-315	0796 2650 191	50	667	20
NM377	90-ET-316	0796 2650 192	63	1047	12
NM388	90-ET-317	0796 2640 053	75	1473	8
NM399	90-ET-318	0796 2640 054	90	2295	5
NM300	90-ET-319	0796 2640 055	110	3592	3



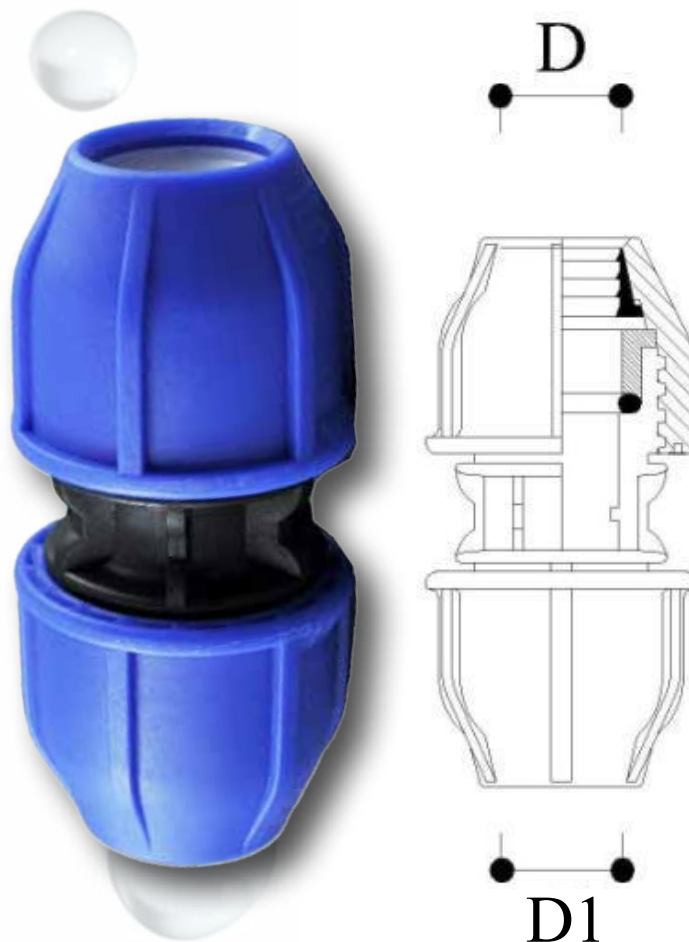
# PUSH FIT PP END CAP (EC)

LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x D / mm	WEIGHT	PACKING
				GM / PC	BOX
NM02	90-EC-311	0796 2650 181	20	36	400
NM03	90-EC-312	0796 2650 182	25	58	250
NM04	90-EC-313	0796 2650 183	32	85	160
NM05	90-EC-314	0796 2650 184	40	148	100
NM06	90-EC-315	0796 2650 185	50	232	50
NM07	90-EC-316	0796 2650 186	63	336	32
NM08	90-EC-317	0796 2640 050	75	493	25
NM09	90-EC-318	0796 2640 051	90	774	16
NM00	90-EC-319	0796 2640 052	110	1223	8



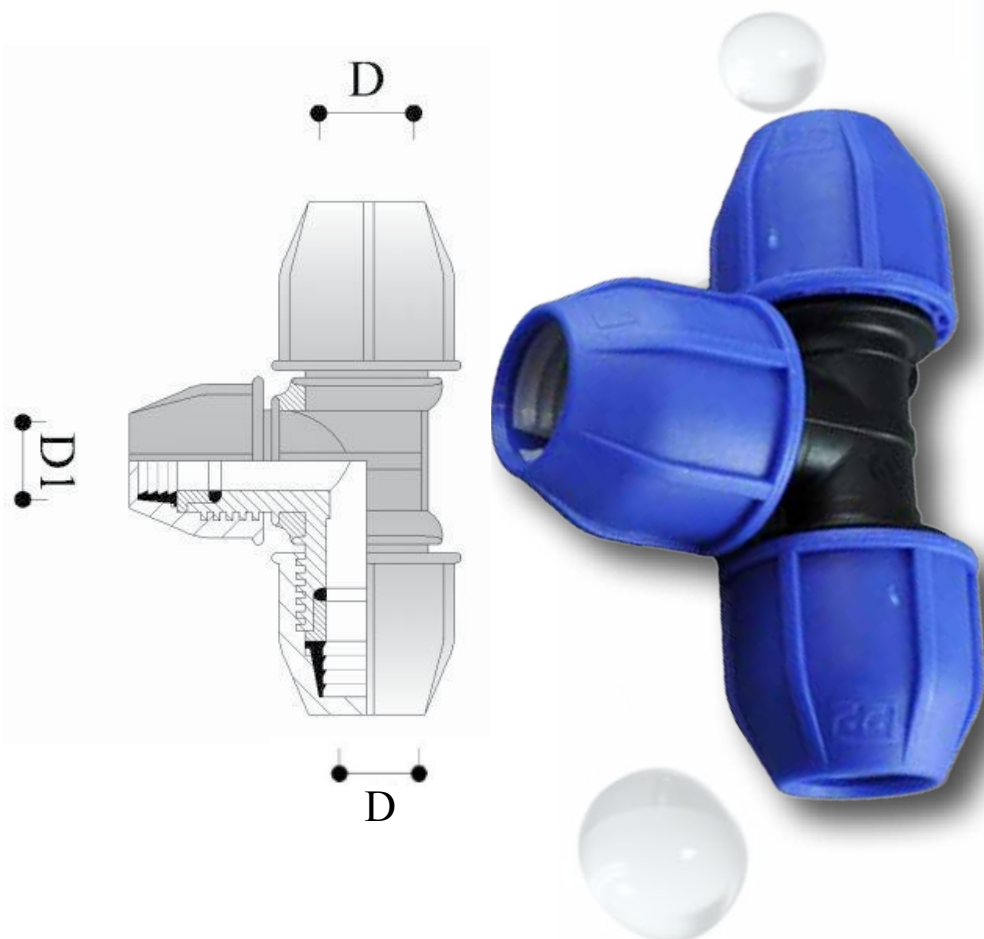
# PUSH FIT PP REDUCING COUPLER (RC)

LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x D1 / mm	WEIGHT	PACKING
				GM / PC	BOX
NM132	90-RC-611	0796 2650 318	25 X 20	84	200
NM142	90-RC-612	0796 2650 319	32 X 20	112	120
NM143	90-RC-613	0796 2650 320	32 X 25	130	120
NM152	90-RC-695	0796 2650 330	40 X 20	179	60
NM153	90-RC-694	0796 2650 329	40 X 25	193	60
NM154	90-RC-614	0796 2650 321	40 X 32	220	60
NM152	90-RC-696	0796 2650 331	50 X 20	261	50
NM153	90-RC-615	0796 2650 322	50 X 25	275	50
NM154	90-RC-616	0796 2650 323	50 X 32	296	50
NM155	90-RC-617	0796 2650 324	50 X 40	349	32
NM173	90-RC-677	0796 2650 328	63 X 25	384	30
NM174	90-RC-618	0796 2650 325	63 X 32	407	30
NM175	90-RC-619	0796 2650 326	63 X 40	456	24
NM176	90-RC-620	0796 2650 327	63 X 50	518	24
NM185	90-RC-0604	0796 2640 078	75 X 40	608	16
NM186	90-RC-679	0796 2640 083	75 X 50	675	16
NM187	90-RC-621	0796 2640 079	75 X 63	753	16
NM197	90-RC-622	0796 2640 080	90 X 63	1036	12
NM198	90-RC-623	0796 2640 081	90 X 75	1150	12
NM109	90-RC-625	0796 2640 082	110 X 90	1826	6



# PUSH FIT PP REDUCING TEE (RT)

LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x D X D1 / mm	WEIGHT	PACKING
				GM / PC	BOX
NM332	90-RT-611	0796 2650 332	25 X 20	42	300
NM342	90-RT-612	0796 2650 333	32 X 20	45	300
NM343	90-RT-613	0796 2650 334	32 X 25	65	200
NM353	90-RT-694	0796 2650 342	40 X 25	68	200
NM354	90-RT-614	0796 2650 335	40 X 32	76	200
NM353	90-RT-615	0796 2650 336	50 X 25	97	120
NM354	90-RT-616	0796 2650 337	50 X 32	107	120
NM355	90-RT-617	0796 2650 338	50 X 40	164	64
NM374	90-RT-618	0796 2650 339	63 X 32	186	64
NM375	90-RT-619	0796 2650 340	63 X 40	191	64
NM376	90-RT-620	0796 2650 341	63 X 50	285	40
NM385	90-RT-0604	0796 2640 084	75 X 40	285	40
NM386	90-RT-679	0796 2640 089	75 X 50	308	40
NM387	90-RT-621	0796 2640 085	75 X 63	410	24
NM397	90-RT-622	0796 2640 086	90 X 63	619	16
NM398	90-RT-623	0796 2640 087	90 X 75	616	16
NM309	90-RT-625	0796 2640 088	110 X 90	997	10



# PUSH FIT PP FLANGE ADAPTOR (FLA)

LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D / mm	WEIGHT	PACKING	BOLTING	
				GM / PC	BOX	NUM	SIZE
NMF76	90-FLA16-316	0796 2600 004	63 x 50DN	684	20	4	M16
NMF98	90-FLA16-318	0796 2600 005	90 x 80DN	1171	9	8	M16
NMF00	90-FLA16-319	0796 2600 006	110 x 100DN	1748	6	8	M16

## INSTALLATION INSTRUCTIONS



1. Dismantle the Flange Adaptor's components before fixing onto stem gate valve.



2. Tighten all bolts, nuts and washers onto the stem gate valve.



3. Assembly of the set components before pipe insertion.



4. Mark the insertion depth on the pipe according to the 'Insertion table'.



5. Loosen the locking nut by one or two threads then insert the pipe into the fitting to the correct depth according to the 'Insertion table'.



6. The locking nut can be tightly fastened by hand, with a tool or a strap wrench.



7. A Flange Adaptor tightened to a stem gate valve or onto a vertical in-line pump.

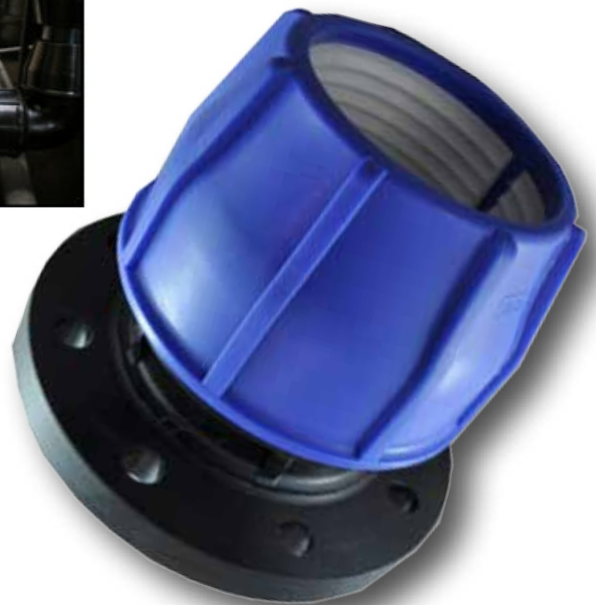


### NOTE:

- 4 pcs of M16 bolt, nuts & washer used for flange adaptor sized 63mm.
- 8 pcs of M16 bolt, nuts & washer used for flange adaptor sized 90mm & 110mm.

### INSERTION TABLE

PIPE OD (mm)	INSERTION DEPTH (mm)
63	100
90	130
110	155



## PUSH FIT PP POP-UP EQUAL BEND (PE)

LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x G / mm	WEIGHT	PACKING
				GM / PC	BOX
NMP21	90-PE-513	0796 2030 181	20 X 1/2"	72	200
NMP31	90-PE-515	0796 2030 182	25 X 1/2"	144	120
NMP42	90-PE-518	0796 2030 183	32 X 3/4"	169	80



## PUSH FIT PP WALL PLATE ELBOW (WPE)

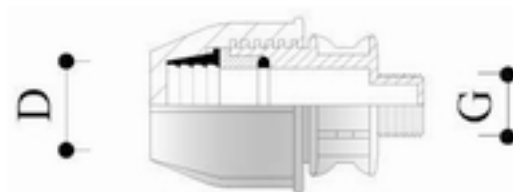
LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x G / mm	WEIGHT	PACKING
				GM / PC	BOX
NMW32	90-WPE-516	0796 2030 360	25 X 3/4"	85	150



# PUSH FIT COMPRESSION FITTINGS WITH BRASS INSERTS

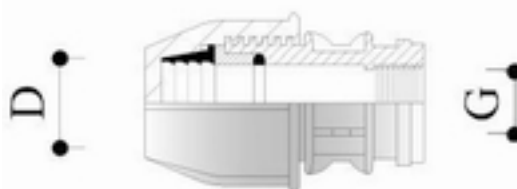
## PUSH FIT PP MALE THREADED ADAPTOR WITH BRASS INSERT (MAB)

LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x G / mm	WEIGHT	PACKING
				GM / PC	BOX
NM221B	90-MA-513B	0796 2651 119	20 x 1/2"	80	400
NM232B	90-MA-516B	0796 2651 123	25 x 3/4"	104	250
NM233B	90-MA-517B	0796 2651 125	25 X 1"	140	250
NM243B	90-MA-519B	0796 2651 129	32 X 1"	167	160



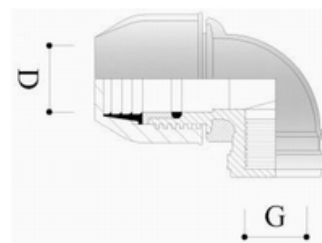
## PUSH FIT PP FEMALE THREADED ADAPTOR WITH BRASS INSERT (FAB)

LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x G / mm	WEIGHT	PACKING
				GM / PC	BOX
NM821B	90-FA-513B	0796 2651 017	20 X 1/2"	80	400
NM832B	90-FA-516B	0796 2651 024	25 x 3/4"	104	250
NM833B	90-FA-517B	0796 2651 027	25 x 1"	140	250
NM843B	90-FA-519B	0796 2651 032	32 x 1"	167	160



## PUSH FIT PP FEMALE THREADED BEND WITH BRASS INSERT (FBB)

LOCAL NUMBER	PART NUMBER	NORMA ITEM NUMBER	DIMENSIONS D x G / mm	WEIGHT	PACKING
				GM / PC	BOX
NM622B	90-FB-514B	0796 2651 053	20 x 3/4"	95	300
NM632B	90-FB-516B	0796 2651 058	25 x 3/4"	113	200
NM643B	90-FB-519B	0796 2651 067	32 x 1"	178	120





# MANUFACTURER'S REFERENCE

## METRIC PE PIPE AS/NZS4130

SDR	11		17		21	
PE100 PE80	PN16 PN12.5		PN10 PN8		PN8 PN6.3	
NOMINAL SIZE (mm)	WALL THICKNESS (mm)	BORE (mm)	WALL THICKNESS (mm)	BORE (mm)	WALL THICKNESS (mm)	BORE (mm)
16	1.6	12.7	-	-	-	-
20	1.9	16.0	-	-	-	-
25	2.3	20.3	1.6	21.7	-	-
32	2.9	26.0	1.9	28.1	1.6	28.7
40	3.7	32.3	2.4	35.0	1.9	36.1
50	4.6	40.4	3.0	43.9	2.4	45.1
63	5.8	51.0	3.8	55.2	3.0	56.9
75	6.8	60.9	4.5	65.8	3.6	67.7
90	8.2	73.0	5.4	79.0	4.3	81.3
110	10.0	89.4	6.6	96.5	5.3	99.2
125	11.4	101.5	7.4	109.9	6.0	112.9
140	12.7	113.9	8.3	123.1	6.7	126.5
160	14.6	130.0	9.5	140.7	7.7	141.7
180	16.4	146.3	10.7	158.3	8.6	157.5
200	18.2	162.5	11.9	175.8	9.6	174.0
225	20.5	182.9	13.4	197.8	10.8	195.0
250	22.7	203.4	14.8	220.0	11.9	216.1
280	25.4	227.8	16.6	268.8	13.4	253.0
315	28.6	256.3	18.7	277.1	15.0	284.9

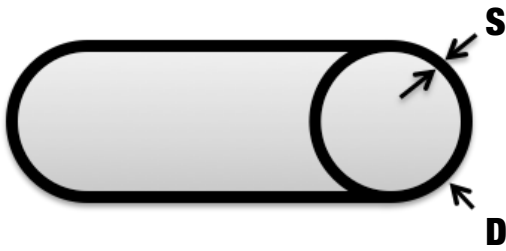
## STANDARD DIMENSION RATIOS (SDR) - FOR SERIES 1 METRIC PE PIPES – AS/NZS4130

Pressure									
MATERIAL	PN3.2	PN4	PN6.3	PN8	PN10	PN12.5	PN16	PN20	PN25
PE80	41	33	21	17	13.6	11	9	7.4	-
PE100	-	41	26	21	17	13.6	11	9	7.4

## CONVERSION TABLE

CONVERSIONS					
1 bar	=	100 kPa*	10 mm	=	1 cm
1 bar	=	14-50 PSI	100 cm	=	1 m
1 m head	=	10 kPa *	1,000 m	=	1 km
1 atmosphere	=	100 kPa *	1 ha	=	10,000 m <sup>2</sup>
1 MPa	=	1,000 kPa *	1 Acre	=	4046.89 m <sup>2</sup>
1 kg/cm <sup>2</sup>	=	10 m head	1 US gal	=	3.785 L
1,000 L	=	1 kL	1 gal	=	4.55 L
1,000 L	=	1 m <sup>3</sup>			

# STANDARD DIMENSION RATIO EXAMPLE



Standard Dimension Ratio (SDR) = Outside Diameter (D) Divide (/) Wall Thickness (S)

Example – PE100, PN16, 110 mm Outside diameter x 10.0 mm Wall Thickness  
= 110/10.0 = 11 (SDR11)

D = pipe outside diameter (mm) S = pipe wall thickness (mm)

A SDR 11 means that the outside – D – of the pipe is eleven times the thickness – S – of the wall.

- With a high SDR the pipe wall is thin compared to the pipe diameter
- With a low SDR the pipe wall is thick compared to the pipe diameter

The higher the SDR, the thinner the pipe and the lower the pressure rating. The term SDR is more widely accepted by engineers as it accurately represents the pipe dimensions and allows the pressure rating to be determined after assessing the installation's conditions.

## PIPE DIMENSIONAL CHART

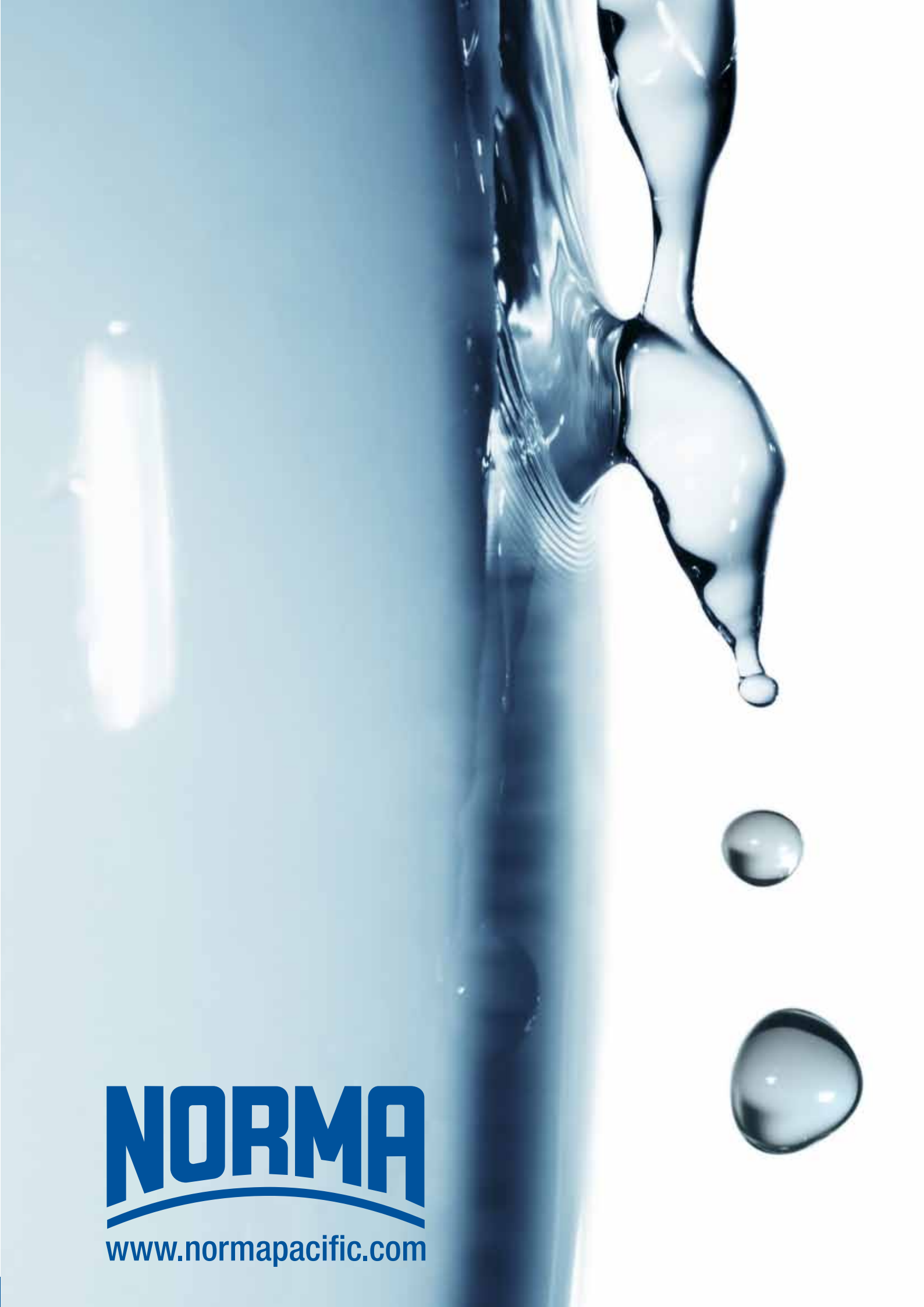
### PIPE OUTSIDE DIAMETERS

				NOMINAL SIZE																					
PIPE MATERIAL	ABBREVIATION	STANDARD	DESIGNATION	50	65	80	100	125	150	175	200	225	250	300	350	375	400	450	500	525	600	675	750		
				PRESSURE PIPE	DUCTILE IRON	DICL	AS/NZS2280 ISO2531/BS EN 545	CLASS K9 OR K12	-	-	96	122	-	177	-	232	259	286	345	-	426	-	507	560	-
-	-	98	118						-	170	-	222	-	274	326	378	-	429	480	532	-	635	-	-	-
STEEL	MSCL GWI	AS1579 AS1074	6 mm WALL THICKNESS		-	-	-	114	-	168	-	219	257	273	324	356	406	457	508	559	-	660	-	813	
					60	76	89	114	140	165	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
POLYVINYL CHLORIDE	UPVC MPVC OPVC	AS/NZS1477 AS/NZS4765 AS/NZS4441	SERIES 1 (White)		60	75	89	114	140	160	200	225	250	280	315	355	400	450	500	560	-	630	-	-	
			SERIES 2 (Blue)		-	-	-	122	-	177	-	232	259	286	345	-	426	-	507	560	-	667	-	-	-
POLYETHYLENE	PE80B or PE100	AS/NZS4130	CLASS PN12.5 or PN16		63	-	90	110/ 125	160	180	-	250	280	315	355	-	450	-	-	-	-	-	-	-	-
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ACRONITRILE BUTADIENE STYRENE	ABS	BS5391 PART 1	CLASS C, E, T		60	75	89	114	140	168	-	219	-	-	-	-	-	-	-	-	-	-	-	-	
GLASS REINFORCED PLASTIC	GRP	AS3571	SN5000 OR SN10000		-	-	-	122	-	177	-	232	259	286	345	399	426	453	507	560	587	667	747	826	
COPPER	CU	AS1432	TYPE A OR B		51	64	76	102	127	152	-	203	229	-	-	-	-	-	-	-	-	-	-	-	
GREY CAST IRON	CICL	AS1724 AS2544	CLASS B CLASS C		-	-	-	122	-	177	-	232	259	286	334	-	413	-	492	545	-	650	-	-	
				-	-	96	122	-	177	-	232	259	286	345	-	426	-	507	560	-	667	-	-	-	-
ASBESTOS CEMENT	AC	AS1711	CLASS AB CLASS CD	-	-	96	122	-	177	-	232	259	286	334	-	413	-	492	-	572	650	-	-		
				-	-	96	122	-	177	-	232	259	286	345	-	426	-	507	-	587	667	747	826	-	-
REINFORCED CONCRETE	RC	AS4058	CLASS 2, 3 OR 4	-	-	-	-	-	197	-	-	279	-	362	-	445	-	533	-	616	699	787	870		
NON PRESSURE PIPE	GREY CAST IRON	SOIL PIPE	AS1631 EN877	-	-	86	112	140	165	-	-	244	-	325	-	-	-	-	-	-	-	-	-		
				-	-	83	110	135	160	-	210	-	274	326	-	-	429	-	532	-	635	-	-	-	-
	PVC	SWV	AS/NZS1260	56	69	83	110	-	160	-	-	250	-	315	-	400	-	-	-	-	-	-	-		
	VITRIFIED CLAY	VC	AS1741	-	-	-	138	-	194	-	-	280	-	370	-	450	485	535	-	635	710	-	-		
	FIBRE REINFORCED CEMENT	FRC		CLASS X	-	-	-	124	-	179	-	245	-	-	261	-	426	-	510	-	594	679	-	-	
					-	-	-	120	-	177	-	230	257	283	336	-	419	-	497	-	576	657	-	-	-
ASBESTOS CEMENT	AC	AS1712	CLASS 35 CLASS 50	-	-	-	122	-	183	-	236	262	289	344	-	425	-	505	-	585	664	-	-		

# FLANGE DIMENSIONS

ANSI		ISO		TABLE E		AS HIGH PRESSURE		AS STANDARD PRESSURE													
<b>AS4087</b> DRILLING COMPATIBLE WITH: AS2129 TABLE C AS2129 TABLE D	<b>CLASS</b>	<b>FIGURE</b>	- DUCTILE IRON	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	
			- CAST IRON	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
			- STEEL	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
		<b>FIGURE</b>	OUTSIDE DIAMETER	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135
			PITCH CIRCLE DIAMETER	114	127	146	165	185	205	230	260	292	324	356	381	405	430	455	480	505	530
			NO. OF HOLES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		<b>FIGURE</b>	DIAMETER OF HOLES	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
			BOLT DIAMETER	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
			<b>THICKNESS</b>	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
		<b>FIGURE</b>	OUTSIDE DIAMETER	165	185	205	230	260	290	320	350	380	410	440	470	500	530	560	590	620	650
			PITCH CIRCLE DIAMETER	127	146	165	191	220	250	280	310	340	370	400	430	460	490	520	550	580	610
			NO. OF HOLES	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
		<b>FIGURE</b>	DIAMETER OF HOLES	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
			BOLT DIAMETER	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
			<b>THICKNESS</b>	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
<b>FIGURE</b>	OUTSIDE DIAMETER	150	165	185	215	255	280	310	340	370	405	455	525	550	580	640	705	735	760		
	PITCH CIRCLE DIAMETER	114	127	146	178	210	235	260	290	324	356	406	470	495	521	584	641	673	705		
	NO. OF HOLES	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
<b>FIGURE</b>	DIAMETER OF HOLES	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18		
	BOLT DIAMETER	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16		
	<b>THICKNESS</b>	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16		
<b>FIGURE</b>	OUTSIDE DIAMETER	165	185	200	220	250	285	340	405	460	520	580	640	715	770	840	910	984			
	PITCH CIRCLE DIAMETER	125	145	160	180	210	240	295	355	410	470	525	585	650	720	790	860	936			
	NO. OF HOLES	4	4	8	8	8	8	8	8	12	12	16	16	20	20	24	24	24			
<b>FIGURE</b>	DIAMETER OF HOLES	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18			
	BOLT DIAMETER	16	16	16	16	16	20	20	24	24	24	24	24	24	24	24	24	24			
	<b>THICKNESS</b>	16	16	16	16	16	20	20	24	24	24	24	24	24	24	24	24	24			
<b>FIGURE</b>	OUTSIDE DIAMETER	152	178	191	229	255	280	343	405	483	533	597	635	699	813	984					
	PITCH CIRCLE DIAMETER	121	140	152	191	216	241	298	362	432	476	540	578	635	749	914					
	NO. OF HOLES	4	4	4	4	8	8	8	8	12	12	16	16	20	20	28					
<b>FIGURE</b>	DIAMETER OF HOLES	19	19	19	19	22	22	22	22	25	29	29	32	32	35	35					
	BOLT DIAMETER	16	16	16	16	20	20	20	20	22	22	25	25	29	29						
	<b>THICKNESS</b>	16	16	16	16	20	20	20	20	22	22	25	25	29	29						
<b>FIGURE</b>	OUTSIDE DIAMETER	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16		
	PITCH CIRCLE DIAMETER	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16		
	NO. OF HOLES	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16		
<b>FIGURE</b>	DIAMETER OF HOLES	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16		
	BOLT DIAMETER	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16		
	<b>THICKNESS</b>	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16		

NOMINAL SIZE



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