

# Hynds Water | PVC Pipe Systems

# **PVC Pipe Systems**

Hynds offer a complete range of PVC pipe and fittings for water applications. All PVC pipe and fittings are manufactured in accordance with relevant standards including AS/NZS 1477, AS/NZS 4765 and AS/NZS 4441.



#### **PVC Pressure Pipe**

TABLE 1 Series 1 White uPVC/mPVC Pressure Pipe (800-PN12.6 RJ/850-PN12.6 RJ)

Size	Inside Diameter	Outside Diameter
80 mm	80 mm	89 mm
100 mm	100 mm	114 mm
125 mm	125 mm	140 mm
150 mm	150 mm	160 mm
175 mm	175 mm	200 mm
200 mm	200 mm	225 mm
225 mm	225 mm	250 mm
250 mm	250 mm	280 mm
300 mm	300 mm	315 mm
375 mm	375 mm	400 mm
400 mm	400 mm	450 mm
450 mm	450 mm	500 mm

#### TABLE 2 Series 2 Blue uPVC/mPVC Pressure Pipe (1800-PN12.6 RJ/1850-PN12.6 RJ) Ductile Iron, Asbestos Cement

Size	Inside Diameter	Outside Diameter
80 mm	80 mm	96 mm
100 mm	100 mm	122 mm
150 mm	150 mm	177 mm
200 mm	200 mm	232 mm
225 mm	225 mm	259 mm
250 mm	250 mm	286 mm
300 mm	300 mm	345 mm
375 mm	375 mm	426 mm
450 mm	450 mm	560 mm

# Hynds Water | PE Pipe Systems



# **PE Pipe Systems**

All polyethylene pipe and fittings (PE80 and PE100) are manufactured in accordance with relevant standards including AS/NZS 4130 and AS/NZS 4129.





NOM.	SDR 41	SDR 33	SDR 26	SDR 21	SDR 17	SDR 13.6	SDR 11	SDR 9	SDR 7.4
PE80	PN 3.2	PN 4	_	PN 6.3	PN 8	PN 10	PN 12.5	PN 12.5	PN 20
MDPE									
PE100	PN 4	_	PN 6.3	PN 8	PN 10	PN 12.5	PN 16	PN 16	PN 25
HDPF									

Size DN	Min. Wall Thick- ness	Mean I.D.		Mean I.D.		Mean I.D.	Min.	Mean I.D.		Mean I.D.		Mean I.D.		Mean I.D.	Min. Wall Thick- ness	Mean I.D.		Mean I.D.
16	1.6	13	1.6	13	1.6	13	1.6	13	1.6	13	1.6	13	1.6	13	1.8	12	2.2	11
20	1.6	17	1.6	17	1.6	17	1.6	17	1.6	17	1.6	17	1.9	16	2.3	15	2.8	14
25	1.6	22	1.6	22	1.6	22	1.6	22	1.6	22	1.9	21	2.3	20	2.8	19	3.5	18
32	1.6	29	1.6	29	1.6	29	1.6	29	1.9	28	2.4	27	2.9	26	3.6	24	4.4	23
40	1.6	37	1.6	37	1.6	37	1.9	36	2.4	35	3.0	34	3.7	32	4.5	31	5.5	28
50	1.6	47	1.6	47	2.0	46	2.4	45	3	44	3.7	42	4.6	40	5.6	38	6.9	35
63	1.6	60	2.0	59	2.4	58	3.0	57	3.8	55	4.7	53	5.8	51	7.1	48	8.6	45
75	1.9	71	2.3	70	2.9	69	3.6	67	4.5	66	5.5	63	6.8	61	8.4	58	10.3	53
90	2.2	86	2.8	84	3.5	83	4.3	81	5.4	78	6.6	76	8.2	73	10.1	69	12.3	65
110	2.7	105	3.4	103	4.3	101	5.3	99	6.6	96	8.1	93	10.0	89	12.3	84	15.1	78
125	3.1	119	3.9	117	4.8	115	6.0	113	7.4	110	9.2	106	11.4	101	14.0	96	17.1	89
140	3.5	133	4.3	131	5.4	129	6.7	126	8.3	123	10.3	118	12.7	114	15.7	108	19.2	99
160	4.0	152	4.9	150	6.2	148	7.7	144	9.5	140	11.8	136	14.6	130	17.9	123	21.9	114
180	4.4	171	5.5	169	6.9	166	8.6	163	10.7	158	13.3	153	16.4	145	20.1	138	24.6	128
200	4.9	190	6.2	188	7.7	184	9.6	180	11.9	175	14.7	170	18.2	162	22.4	154	27.3	143
225	5.5	215	6.9	211	8.6	207	10.8	203	13.4	198	16.6	191	20.5	183	25.1	173	30.8	161
250	6.2	238	7.7	235	9.6	230	11.9	225	14.8	219	18.4	212	22.7	203	27.9	192	34.2	179
280	6.9	267	8.6	263	10.7	258	13.4	253	16.4	246	20.6	238	25.4	228	31.3	215	38.3	200
315	7.7	300	9.7	296	12.1	290	15.0	285	18.7	278	23.2	268	28.6	256	35.2	242	43.0	226
355	8.7	338	10.9	333	13.6	328	16.9	320	21.1	311	26.1	301	32.2	289	39.6	273	48.5	225
400	9.8	380	12.3	376	15.3	370	19.1	362	23.7	351	29.4	340	36.3	326	44.7	307	54.6	287
450	11.0	429	13.8	422	17.2	415	21.5	406	26.7	395	33.1	382	40.9	366	50.2	347	61.5	322
500	12.3	476	15.3	470	19.1	462	23.9	452	29.6	440	36.8	424	45.4	407	55.8	348		
560	13.7	534	17.2	526	21.4	517	26.7	506	33.2	493	41.2	476	50.8	456				
630	15.4	600	19.3	592	24.1	582	30.0	570	37.3	554	46.3	535	57.2	513				
710	17.4	677	21.8	667	27.2	656	33.9	642	42.1	625	52.2	603						
800	19.6	762	24.5	752	30.6	739	38.1	723	47.4	704	58.8	680						
900	22.0	858	27.6	846	34.4	832	42.9	814	53.5	792		_					_	
1000	24.5	953	30.6	940	38.2	924	47.7	904	59.3	880		•			•		-	
1200	29.4	1143	36.7	1128	45.9	1109	57.2	1085		•		•	-	•	-			

# **Pipe Sizing Chart**

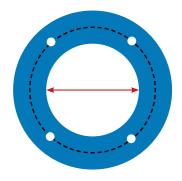
Р	ressure Pipe													No	minal	Diame	ter											
Material Designation		Standard	50	65	80	100	125	150	175	200	225	250	300	350	375	400	450	500	525	600	675	700	750	800	900	1000	1100	1200
Ductile Iron (DICL)	International	DIS2531E	66	82	98	118	144	170		222		274	326	378		429	480	532		635	738	738	790	842	945	1048	1152	1255
	Class K9 or K12	AS2280		•	96	122		177	•	232	259	286	345		426		507	560	,	667	,	·	826	,		,		
Glass Reinforced Plastic (GRP)		AS1413	***************************************	•		122		177		232	259	286	345	399	426	453	507	560	587	667	747		826	,	924	1026		1229
Cast Iron (CICL)	Class B	AS1742-2				122		177		232	259	286	334		413		492	545	,	650	,	•		•				
CICL	Class C	AS1544		,	96	122	149	177	203	232	259	286	345		426		507	560	,	667	,	<b>~</b>	,	<b>,</b>		,		
Asbestos Cement	Class AB	AS1711		,	96	122		177		232	259	286	334		413		492	•	572	650	,	<b>~</b>	,	<b>y</b>		,	,	
(AC)	Class CD	AS1711		•	96	122		177		232	259	286	345		426		507	•	587	667	747	······	826	<b>,</b>		,	,	
Polyvinyl Chloride	Imperial (Blue)	AS1477			,	122		177		232	259	286	345		426	,	507	•	560	667	,	***************************************	,	<b>,</b>		,		
(PVC)	Metric (White)	AS1477	60	75	89	114	140	160	200	225	250	280	315	355	400	450	500	560	,	630	,	<b>~</b>	,	<b>,</b>		,		
Steel (MSCL)	Std. W.T.	AS1579				114		168		219		273	324	356		406	457	508		610		711	762	813, 864	914	1067		1220
Galvanized Steel	GWI	AS1074	60	76	89	114	140	165	•	•							¥	~	,			·	,	,		,		
Polyethylene (PE 80B or PE100)	SR13.6 PN12.5 or SDR11 PN16	AS4130	63	75	90	110, 125	140	160, 180	200	250, 225		280, 315	355	400	400, 450	450, 500	500, 560	-	630	710	800		900	1000	1100	1200		1400
Reinforced Concrete (RC)	Class 2-12	AS4058		•				197		•	279		362		445		533	•	616	699	787		870		946	1029	1105, 1194	1270, 1354
Copper (CU)		AS3688	51	64	76	102	127	152		203	229						~	•						,				

The figures in this chart are rounded to the nearest whole number. This should only be used as a guide.

# **Identifying Flanges**

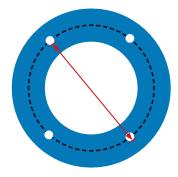
The number of holes, size of the holes, pitch circle diameter (PCD) and thickness of flange depends on the flange standard. Most flanged watermain fittings have AS4087 Table D or AS2129 Table E Flanges. However, some areas specify AS2129 Table E and there are certain circumstances where BS4504 PN16 flanging is required.

**Note:** Some fittings such as Viking Johnson Maxiadaptors, have flanges with slotted holes and therefore will suit several flange drillings.



### Flange Size

This relates to the inside diameter of the pipe or fitting which generally matches the flange. This does not apply to backing rings as they need to slide over the pipe fitting. This size could be referred to in millimetres or inches.



### Pitch Circle Diameter (PCD)

This is the diameter of an imaginary circle drawn through the fixing holes of a flange. An accurate way to measure this would be to run a tape measure from the outside edge of one hole to the inside edge of an opposing hole (red arrow).



#### **Size of Bolts**

Relates to the diameter of the bolt holes. If the bolt size is specified as M16 (16 mm diameter bolt) the bolt hole will be a slightly larger diameter (eg 18 mm  $\emptyset$ ) to easily accommodate the bolt.

# **Flange Dimensions**

														N	ominal	Diamet	ter										
AS408	87 - St	andard	l Pressure	50	65	80	100	125	150	175	200	225	250	300	350	375	400	450	500	525	600	700	750	800	900	1000	1200
Drilling compatible	e with:		Outside Diameter	150	165	185	215	255*	280		335	370	405	455	525	550	580	640	705		825	910	995	1060	1175	1255	1490
AS2129 Table C			Pitch Circle Diameter	114	127	146	178	210*	235	,	292	324	356	406	470	495	521	584	641	***************************************	756	845	927	984	1092	1175	1410
AS2129 Table D			No. of Holes	4	4	4	4	8*	8	,	8	8	8	12	12	12	12	12	16	***************************************	16	20	20	20	24	24	32
			Hole Diameter	18	18	18	18	18*	18	•	18	18	22	22	26	26	26	26	26	•	30	30	33	36	36	36	36
			Bolt Diameter	16	16	16	16	16*	16	,	16	16	20	20	24	24	24	24	24	•	27	27	30	33	33	33	33
Cla	ass	Figure	•		•	-	*	***************************************	,		***************************************	•	•	***************************************	***************************************	•	-	•	*	-	,		***************************************	,	·	•	•
PN	V16	B5	Thickness - DI		,	18	20	•	23		23	24	24	30	33	33	33	33	35	•	42	45	47	48	52	56	63
PN	V14	B2	Thickness - CI		•	19	22	•	22		25	25	25	29	32	32	32	35	38		41	44	48	48	51	54	60
PN	V16	В7	Thickness - Steel	11	11	11	13	•	13		19	19	19	23	30	30	30	30	38	•	48	56	56	56	66	66	76
EN1	1092 (I	SO 700	5) PN16	50	65	80	100	125	150	175	200	225	250	300	350	375	400	450	500	525	600	700	750	800	900	1000	1200
Drilling compatible with:			Outside Diameter	165	185	200	220	250	285		340		405	460	520		580	640	715		840	910		1025	1125	1255	1485
BS4504 PN16			Pitch Circle Diameter	125	145	160	180	210	240		295	•	355	410	470	***************************************	525	585	650	•	770	840	<b>,</b>	950	1050	1170	1390
DIN2533 PN16			No. of Holes	4	4	8	8	8	8	,	12	•	12	12	16	*	16	20	20	•	20	24	*	24	28	28	32
			Hole Diameter	19	19	19	19	19	23	,	23	•	28	28	28	*	31	31	34	·	37	37	*	41	41	44	50
			Bolt Diameter	16	16	16	16	16	20	,	20	·•	24	24	24	•	27	27	30	·•	33	33	***************************************	36	36	39	45
Cla	ass	Table	······	***************************************	•	·	•	•	<b>,</b>	,	<b></b>	•	•	<b>~</b>	•	•	<b>~</b>	•	<b>~</b>	·	•	•	***************************************	•	<b>v</b> ······	••••••	•
16	·······	11	Thickness - DI	19	19	19	19	19	19	•	20	•	22	24.5	26.5	•	28	30	31.5	•	36	39.5	*	43	46.5	50	57
16	······	11	Thickness - CI	22	20	22	24	26	26	•	30	•	32	32	36	•	38	40	42	•	48	54	*	58	62	66	-
	AS212	29 - Tab	le E	50	65	80	100	125	150	175	200	225	250	300	350	375	400	450	500	525	600	700	750	800	900	1000	1200
			Outside Diameter	150	165	185	215	255	280		335		405	455	525		580	640	705		825	910	995	1060	1175	1255	1490
			Pitch Circle Diameter	114	127	146	178	210	235		292	•	356	406	470	<b>,</b>	521	584	641	•	756	845	927	984	1092	1175	1410
			No. of Holes	4	4	4	8	8	8	,	8	•	12	12	12	•	12	16	16	***************************************	16	20	20	20	24	24	32
			Hole Diameter	18	18	18	18	18	22	•	22	•	22	26	26	•	26	26	26	***************************************	33	33	36	36	36	39	39
			Bolt Diameter	16	16	16	16	16	20		20	•	20	24	24	***************************************	24	24	24	•	30	30	33	33	33	36	36
Cla	ass	Table	•		•		•	•••••	***************************************	•••••	<b>~</b> ······	•	*	<b>~</b> ······	***************************************	*		•	•		•	•	***************************************	•	<b>~</b> ······	•••••	•
PN	V14	E	Thickness - CI / DI	19	19	19	22	22	22		25	•	25	29	32	*	32	35	38	•	41	44	48	48	51	54	60
AS	4087 -	High P	ressure	50	65	80	100	125	150	175	200	225	250	300	350	375	400	450	500	525	600	700	750	800	900	1000	1200
Drilling compatible	e with:		Outside Diameter	165	185	205	230	280**	305		370	405	430	490	550	580	610	675	735		850	935	1015	1060	1185	1275	1530
AS2129 Table F			Pitch Circle Diameter	127	146	165	191	235**	260		324	356	381	438	495	521	552	610	673	·	781	857	940	984	1105	1194	1441
AS2129 Table H			No. of Holes	4	8	8	8	8**	12		12	12	12	16	16	16	20	20	24	·	24	24	28	28	32	36	40
			Hole Diameter	18	18	18	18	22**	22		22	26	26	26	30	30	30	33	33	•	36	36	36	36	39	39	42
			Bolt Diameter	16	16	16	16	20**	20	,	20	24	24	24	27	27	27	30	30	*	33	33	33	33	36	36	39
Cla	ass	Figure	,		•	·	•	•	<b>,</b>	,	·····	•	*	¥	<del></del>	*	·	•••••	·····	·•	•	Ψ	<del></del>	•	·····	••••••	•
PN	135	В6	Thickness - DI		•	22	22	•	27	,	31	34	34	38	41	42	44	46	49	***************************************	54	58	59	63	68	72	82
PN		B3	Thickness - CI		<b>,</b>	19	22	•••••	25	,	29	29	32	32	35	35	35	38	41	•	44	48	51	52	57	60	67
PN		B4	Thickness - CI		•	29	32	•	35		41	41	44	44	48	51	51	54	57	·	64	<b>~</b>	·	•	<b>V</b>	•	•
PN		B8	Thickness - Steel	15	15	15	19	•	24		24	30	30	30	30	38	38	38	48	•	58	58	58	68	68	78	88

# Hynds Water | Valves & Hydrants

# Valves & Hydrants



Full comprehensive range of valves for water supply and wastewater applications.

- Gate valves
- Hydrants
- Check/non-return/reflux valves
- Knifegate valves
- Butterfly valves
- Needle valves

- Air release valves
- Actuator and extension packages
- Plug valves
- Ball valves
- Control valves

















# Scan for more information

# **Pipe Fittings**

Full comprehensive range of pipe fittings for water and wastewater applications.

- PE Electrofusion/Buttweld fittings
- Compression fittings
- Couplings restraint / non-restraint
- Encapsulations collars for repair under pressure
- Flexible couplings
- Dismantling Joints
- Ductile Iron fittings

- Hot tapping saddles
- Seismic joints
- Restrained couplings and flange adaptors
- Low pressure waste water couplings
- Brassware
- Repair clamps & saddles























# **PE Tools & Machines**

Polyethylene tools for pipe cutting, cleaning, re rounding, clamping and welding.







## **Our Brands**

Our range of specialist water products are sourced globally from the world's best brands and agencies and backed by our Hynds Water team of industry experts.



- DI Fittings
- Hydrants
- Swing check valves
- Ball check valves
- Strainer Y-style
- Air release valves



- Electrofusion & buttweld fittings
- PE Tools & machines



- Valves
- Fittings
- Couplings
- Haku Pipe Saddles



 Multigrip & Duo fit large bore couplings



- Butterfly valves
- Check valves
- Foot valves
- Needle valves
- Air valves



- Dismantling joints
- Ultragrip couplers
- Ultragrip flanged adaptors
- Ultragrip End Caps

# Hynds Water | Gillies Metaltech

# **Gillies Metaltech**

Gillies Metaltech is New Zealand's only manufacturer of cast ferrous metal fittings and valve systems.



Originally established on its present site at Oamaru in 1924, Gillies Metaltech has a well established reputation for designing and manufacturing quality cast metal watermain products, and special purpose pumps. Gillies manufactures in both cast iron and ductile iron.







### **Quality Standards**

Gillies Metaltech has third party "S-Mark" certification for full range of ductile iron watermain fittings manufactured to AS/NZS2280, and is New Zealand's only manufacturer of NZS4522 Fire Hydrants.

Gillies is externally audited to the ISO9001 Quality Management System.

#### **Design Service**

Combining traditional pattern making with new technology, Gillies team of engineers utilise the latest software for 3D modelling and stress analysis in product development and innovation.

#### **Expertise**

In addition to the standard range of product, Gillies are able to custom design one off 'specials' that comply with the specified standard AS/NZS 2280. The foundry and engineering operations specialise in short run unique demand for waterwork and other industrial applications.

#### **Product & Service Range**

- Ferrous metal casting capabilities
- Fabrication of large bore steel irrigation fittings
- Fabrication of irrigation fittings using glass reinforced polymer
- Manufacture of NZS4522 Fire Hydrants
- Unlimited capacity for heavy machining and structural engineering
- Design, innovation, research and development

## Hawle

### No Compromise on Quality



The Hawle Austria Group produces and distributes valves and fittings for water distribution all over the world. These products have been manufactured for generations and are used in urban water management from the source right through to the connection in the house.





#### About us

The pioneer Engelbert Hawle founded the company in Vöcklabruck, Austria, in 1948. His idea was to create a revolutionary pipe connection for drinking water pipelines. His workshop was modest but he made up for that with plenty of ideas and passion, always aiming to achieve customer-oriented solutions. With pioneering spirit and the ambition to keep developing his products further, Hawle reached ever greater milestones over the decades.

Drinking water is one of the most important resources in the world and has been a priority at Hawle for more than 70 years. Clean drinking water means life, and with life comes certain obligations. This is why Hawle is creating the most secure connections in the global drinking water supply.

Today, Hawle is the leading company for quality in heavy-duty valves. A 10 year warranty with each valve provides peace of mind.

#### The Group

The Group is now a global player and has remained in family control since the beginning. Hawle always keeps the future in mind and has an international vision, striving to develop the company in a sustainable and positive way.

# Özkan

ÖZKAN was founded in 1983 and has been a member of the Hawle Austria Group since 2011.









#### Introduction

Part of the Hawle group, ÖZKAN are based in Turkey and are manufacturers of high performance valves for the three waters infrastructure including pipelines, pump stations, distribution, and irrigation.

ÖZKAN specialises in butterfly valves, needle valves, check valves, dismantling joints, air release valves, and speciality control valves

to meet project needs from 200mm to 3000mm diameter.

Quality has been the main principle of ÖZKAN since its foundation

Product range, experience, project based custom production, and on-time delivery performance are the features that make ÖZKAN preferable.

# **Nova Siria**

NOVA SIRIA is part of the Hawle Austria Group and has more than 85 years of experience as a leading manufacturer in large size and tailor-made fittings.









#### About us

Based in Italy, Nova Siria export to more than 40 countries all over the world to the civil and rural markets.

Nova Siria specialise in design and manufacture of pipeline couplings for performance beyond normal expectations.

Through design excellence, 3D modelling and FEA, Nova Siria produce robust solutions for live pipeline repair, hot tapping and self restraining couplings.

With tolerance up to 50mm, pressure testing up to 100bar and sizes up to 2500mm - Nova Siria is a true solutions supplier.

