

Quick Release Couplings
Efficient Connections for Flexible Lines



Quick Release Couplings

Quick Release Coupling is a device used for easy, quick & leakproof connections & disconnections of flexible pipes carrying fluids. It has numerous advantages over conventional methods. Some of these are mentioned below.

Cost effective : Zero leakage saves valuable compressed air & precious chemicals. Very fast changeover reduces down time. Saves piping cost where temporary connections will suffice. Twisting of pipe is corrected automatically. Eliminates frequent pipe changes due to shortening of length.

Safe : Provides greater safety by automatic shut off. Stops leakages and spillages of hazardous fluids.

Efficient : No tool is required. It is very easy to use & operation is effortless.

Applications : Considering the advantages, QRC is used in many industries & has found wide applications. QRC's are used in industries like Engineering, Automobile, Machine tools, Chemicals, Refineries, Fertiliser, Pharmaceutical, Cement Paint, Sintering, Petroleum, Boiler, Furnace, Refrigeration, Textile etc. for leakproof handling of compressed air, water, oil, chemicals, vacuum, gases, liquids & powders.

Material of seal & temperature range

Material	Temperature	Characteristics
High Nitrile	-20 C to +80 C	Highly resistant to oil & water.
Viton	-20 C to +180 C	Resistant to acids & aromatic compounds.

Teflon, E.P.D.M & Silicon seals are available on request. (Size of any Teflon seal couplings of any type are different than mentioned in the technical data on the following pages.)

Through

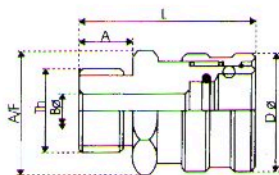
This type of coupling has very simple valves mechanism which allows streamlined & smooth flow of the fluid without any notable pressure drop. Hence it is ideally suitable for high velocity fluids.

Construction :

- No valve - Open both ends.
- End connection - H - Hose nipple
M - Male threads
F - Female threads
- Lock system - Ball lock or pinlock.
- Standard material - steel, stainless Steel, Brass, H. D. P. E. , & P. P.
- Seals - Nitrile, Silicon, Teflon available on request.

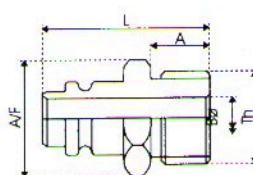
Application - Chemical plants, Ships, Petroleum & other industries.

MALE THREADING SOCKET



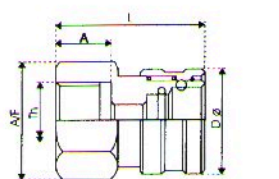
SIZE	L	DØ	A/F	TH	A	BØ
06-SM	37	22	19.1	1/4"x19	12	6.4
09-SM	42	25.4	22.2	3/8"x19	13	9.5
012-SM	47	28	25.4	1/2"x14	14	12.7
019-SM	54	42	42	3/4"x14	19	19.1
025-SM	60	48	50.8	1"x11	22	25.4
038-SM	65	62	62	1-1/2"x11	25	38.2
050-SM	70	75	75	2"x11	30	50.8

MALE THREADING PLUG



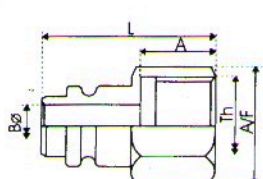
SIZE	L	A/F	TH	A	BØ
06-PM	37	14	1/4"x19	12	6.4
09-PM	38	19.1	3/8"x19	13	9.5
012-PM	39	25.4	1/2"x14	14	12.7
019-PM	47	32	3/4"x14	19	19.1
025-PM	56	35	1"x11	22	25.4
038-PM	62	50	1-1/2"x11	25	38.2
050-PM	68	62	2"x11	30	50.8

FEMALE THREADING SOCKET



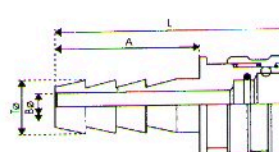
SIZE	L	DØ	A/F	TH	A
06-SF	33	22	19.1	1/4"x19	12
09-SF	37	25.4	22.2	3/8"x19	13
012-SF	40	28	25.4	1/2"x14	14
019-SF	46	42	42	3/4"x14	19
025-SF	52	48	50.8	1"x11	22
038-SF	57	62	62	1-1/2"x11	25
050-SF	61	75	75	2"x11	30

FEMALE THREADING PLUG



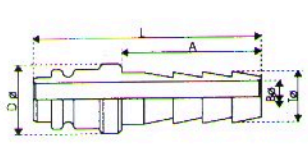
SIZE	L	A/F	TH	A	BØ
06-PF	35	14	1/4"x19	12	6.4
09-PF	36	19.1	3/8"x19	13	9.5
012-PF	37	25.4	1/2"x14	14	12.7
019-PF	44	32	3/4"x14	19	19.1
025-PF	51	35	1"x11	22	25.4
038-PF	57	50	1-1/2"x11	25	38.2
050-PF	63	62	2"x11	30	50.8

HOSE PIPE SOCKET



SIZE	L	DØ	TØ	A	BØ
06-SH	50	22	7.5	25	4.5
09-SH	57	25.4	11	28	7.5
012-SH	65	28	14	32	9.5
019-SH	75	42	21	40	16
025-SH	93	48	27	55	22
038-SH	115	62	40	75	35

HOSE PIPE PLUG



SIZE	L	DØ	TØ	A	BØ
06-PH	50	14	7.5	25	4.5
09-PH	53	19.1	11	28	7.5
012-PH	57	25.4	14	32	9.5
019-PH	68	32	21	40	16
025-PH	92	35	27	55	22
038-PH	113	50	40	75	35

Single Shut Off

These couplings have automatic shut off valve only in the socket. Therefore is used on the supply side. This type is popularly used for air piping, Connecting pneumatic tools, cooling water connections for molds and connections for breathing apparatus. Additional safety lock can also be provided.

Construction :

Valve - Automatic shut off valve only in the socket.

Lock system - Ball lock or pinlock

End connections : H - Hose nipple

Standard material - Steel, Stainless steel, Brass,

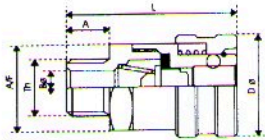
M - Male threads

Aluminum.

F - Female threads

Seals - Nitrile, Viton, Teflon available on request.

Application - Mining, Engineering, Aircraft & petroleum industries.



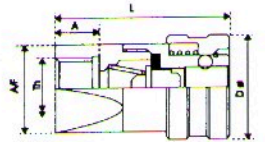
MALE THREADING SOCKET

SIZE	L	DØ	A/F	TH	A	BØ
16-SM	55	22	19	1/4"x19	13	6.4
19-SM	57	25.4	22	3/8"x19	14	9.5
112-SM	63	35	30	1/2"x14	16	12.7
119-SM	67	38	32	3/4"x14	18	19.1



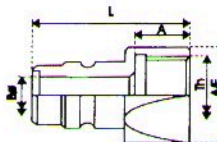
MALE THREADING PLUG

SIZE	L	A/F	TH	A	BØ
16-PM	41	14	1/4"x19	13	6.4
19-PM	42	19.1	3/8"x19	14	9.5
112-PM	50	25.4	1/2"x14	16	12.7
119-PM	55	30	3/4"x14	18	19.1



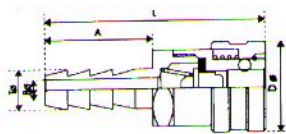
FEMALE THREADING SOCKET

SIZE	L	DØ	A/F	TH	A
16-SF	50	22	19	1/4"x19	12
19-SF	51	25.4	22	3/8"x19	13
112-SF	57	35	30	1/2"x14	14
119-SF	61	38	32	3/4"x14	19



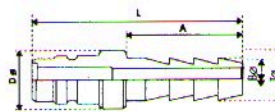
FEMALE THREADING PLUG

SIZE	L	A/F	TH	A	BØ
16-PF	36	16	1/4"x19	13	6.4
19-PF	37	17	3/8"x19	14	9.5
112-PF	41	30	1/2"x14	15	12.7
119-PF	45	32	3/4"x14	17	19.1



HOSE PIPE SOCKET

SIZE	L	DØ	TØ	A	BØ
16-SH	72	22	8	30	4.5
19-SH	76	25.4	11	34	7.5
112-SH	83	35	14.5	36	9.5
119-SH	92	38	21	45	17



HOSE PIPE PLUG

SIZE	L	DØ	TØ	A	BØ
16-PH	57	14	8	30	4.5
19-PH	61	19.1	11	34	7.5
112-PH	66	25.4	14.5	36	9.5
119-PH	72	30	21	45	17

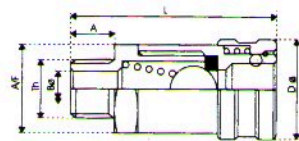
Single Shut Off Heavy Duty

These couplings are specially designed to achieve higher leakproof life by providing more tightness & sealing area. Due to ultra tightness, these couplings can be used on vacuum lines. A typical usage for vacuum cleaning of tableting cubical in Pharmaceutical industries.

Constructions : Identical to single shut off

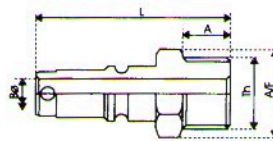
Standard sizes - 1/4", 3/8" & 1/2"NB Available upto 3" on request.

Application - Ideally Suitable where frequency of connection & disconnection is high.



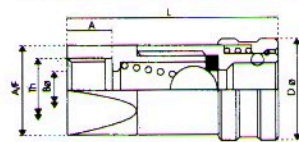
MALE THREADING SOCKET

SIZE	L	DØ	A/F	TH	A	BØ
1H6-SM	60	22	19.1	1/4"x19	13	6.5
1H9-SM	63	28	25.4	3/8"x19	13	9.5
1H12-SM	70	35	30	1/2"x14	13	12.7



MALE THREADING PLUG

SIZE	L	A/F	TH	A	BØ
1H6-PM	48	17	1/4"x19	13	5.5
1H9-PM	56	19.1	3/8"x19	13	9.0
1H12-PM	57	25.4	1/2"x14	14	9.5



FEMALE THREADING SOCKET

SIZE	L	DØ	A/F	TH	A	BØ
1H6-SF	60	22	19.1	1/4"x19	13	6.5
1H9-SF	63	28	25.4	3/8"x19	13	9.5
1H12-SF	70	35	30	1/2"x14	13	12.7



FEMALE THREADING PLUG

SIZE	L	A/F	TH	A	BØ
1H6-PM	44	17	1/4"x19	13	5.5
1H9-PM	52	19.1	3/8"x19	13	9.5
1H12-PM	53	25.4	1/2"x14	14	9.5



HOSE PIPE PLUG

SIZE	L	DØ	TØ	A	BØ
1H6-PH	65	12.7	7.5	30	4.5
1H9-PH	77	18	11	34	7.5
1H12-PH	53	19	14.5	36	9.5

Double Shut Off



These couplings have automatic shut off valve at both ends; in socket & plug also. So on disconnection, both socket & plug are sealed instantly. This type is widely used on Hydraulic lines carrying oils, water, chemicals & petroleum products. Material & seal are selected to suit the type of fluid.

Construction

Value - Automatic shut off valve in both, socket & plug

End Connection - F - Female screw.

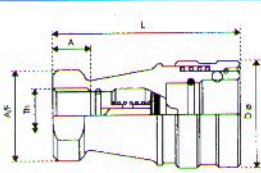
Seal - Nitrile, Viton, Teflon - available on request.

Application - Chemical plants, Refineries, Ships.

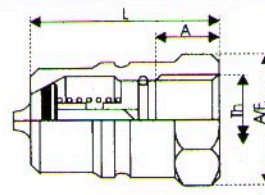
Lock System - Ball lock or pin lock.

Standard Material - Stainless Steel, Brass.

Carbon Steel



SIZE	L	DØ	A/F	TH	A
26-S	55	28	19	1/4"x19	13
29-S	65	35	21	3/8"x19	14
212-S	73	45	29	1/2"x14	15
219-S	88	55	35	3/4"x14	17
225-S	102	65	41	1"x11	20
230-S	115	79	54	1-1/4"x11	24
238-S	125	89	63	1-1/2"x11	25
250-S	132	109	77	2"x11	27



SIZE	L	A/F	TH	A
26-P	36	17	1/4"x19	13
29-P	40	21	3/8"x19	13
212-P	44	30	1/2"x14	15
219-P	52	35	3/4"x14	17
225-P	62	42	1"x11	20
230-P	70	54	1-1/4"x11	24
238-P	75	63	1-1/2"x11	24
250-P	80	77	2"x11	27

Double Shut Off (Vacuum)

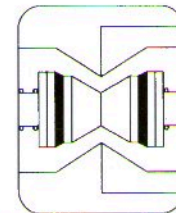
These couplings have same external configuration as Double shut off Couplings, but internal automatic valve mechanism is designed for ultra tight closing to withstand high vacuum. They are recommended for use in vacuum evacuation, Feron charging, & Refrigerating machine oil.

Construction - Same as Double Shut Off valve.

Material - Brass.

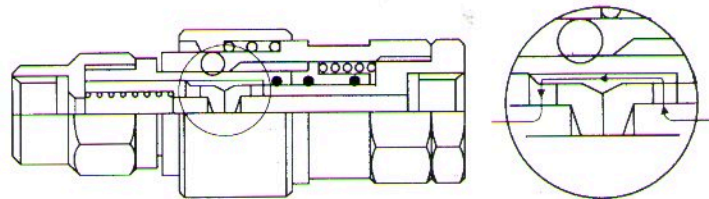
Seal - Neoprene for Ferron R-11, 12, 22. Refrigerating machine oil. Viton for Ferron R-11, 12 Refrigerating machine oil.

Size - 1/4", 3/8", 1/2" & 3/4" only.



Enlarged View of Valve

Double Shut Off (High Pressure)



These coupling are designed for high pressure applications. As there is no air gap between plug & socket when connected, there is no chance of any air entering hydraulic lines, so air bleeding is unnecessary. Fluid leakage at the time of connection or disconnection is nil because it flows through the holes at the centre of the valve body. Designed to provide one touch connection.

Seal - Nitrile, Silicon

Application - High Pressure Hydraulic equipments & testing equipment. For hydraulic circuits having large pressure changes.

Cam Lock Couplings



Applications

- Loading & unloading of tanker for water, petrol & chemicals.
- Internationally accepted design for Fire Fighting hose connections.
- For large vacuum or suction lines.
- Flow of powders in chemical, pharmaceutical & Fertiliser industries.
- Cooling water connections for paper rolling mills.
- Unloading from large storage tanks for paints or chemicals.
- Ships and Automatic Energy plants.

General Features

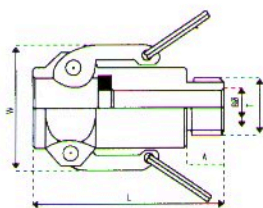
- Provides easiest way of connection on large diameter pipes.
- Gives uniform circular surface sealing
- No friction so no seal wear & hence longer life
- No hinderance to flow so the Pressure drop is minimum.
- Can be locked to prevent accidental opening.

Pressure Range

HPC model	Brass	Steel	Stainless Steel
Material			
Normal pressure (Kg/cm ²)	22	80	70
Maxi pressure (kg/cm ²)	26	120	100

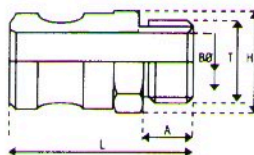
Special Features of HPC model

All parts are machined out of drawn rods. No casting or welding is used. This increases the strength & capacity to withstand high pressures. Heat treatment & tempering gives high wear resistance where necessary.



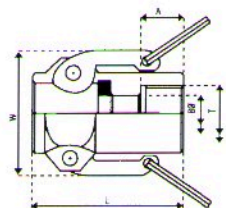
MALE THREADING SOCKETS

SIZE	L	A	TØ	BØ	W	A/F
C12-SM	76	14	1/2"x14	12	54	32
C19-SM	78	18	3/4"x14	19	61	38
C25-SM	84	24	1"x11	25	67	46
C38-SM	84	24	1-1/2"x11	38	80	60
C50-SM	87	27	2"x11	50	92	72



MALE THREADING PLUGS

SIZE	L	A	TØ	BØ	Hx
C12-PM	52	14	1/2"x14	12	25
C19-PM	59	18	3/4"x14	19	30
C25-PM	65	24	1"x11	25	38
C38-PM	69	24	1-1/2"x11	38	56
C50-PM	74	27	2"x11	50	70



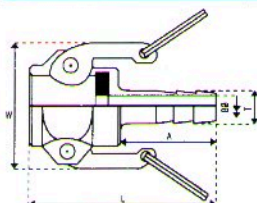
FEMALE THREADING SOCKETS

SIZE	L	A	TØ	BØ	W	A/F
C12-SF	60	15	1/2"x14	12	54	32
C19-SF	60	19	3/4"x14	19	61	38
C25-SF	60	25	1"x11	25	67	46
C38-SF	60	25	1-1/2"x11	38	80	60
C50-SF	60	28	2"x11	50	92	72



FEMALE THREADING PLUGS

SIZE	L	A	TØ	BØ	Hx
C12-PF	47	15	1/2"x14	12	25
C19-PF	55	19	3/4"x14	19	32
C25-PF	61	25	1"x11	25	38
C38-PF	63	24	1-1/2"x11	38	56
C50-PF	66	28	2"x11	50	70



HOSE PIPE SOCKETS

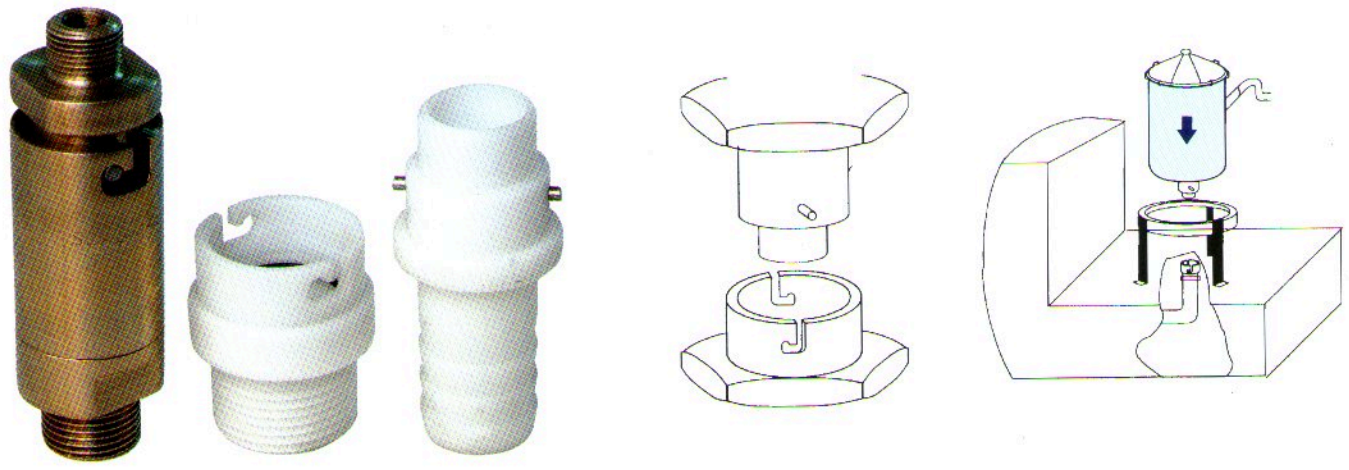
SIZE	L	A	TØ	BØ	W	A/F
C12-SH	74	38	14	9.5	54	32
C19-SH	84	45	21	16	61	38
C25-SH	94	55	27	22	67	46
C38-SH	99	60	40	34	80	60
C50-SH	109	70	52	46	92	72



HOSE PIPE PLUGS

SIZE	L	A	TØ	BØ	HØ
C12-PH	72	38	14	9.5	24
C19-PH	85	45	21	16	30
C25-PH	93	55	27	22	38
C38-PH	100	65	40	34	50
C50-PH	110	70	52	46	65

Pin Lock System



Pin lock system is designed as an alternative to a ball lock system for typical application. This system facilitates use of only one hand to connect or disconnect & so can be effectively used where the connection points are in a closed or difficult to reach position. This system is also useful for flow of powder & slurry. In ball lock, solid particles can enter locking ball mechanism restricting the movement of balls making the connection & disconnection difficult. Pin lock system eliminates this possibility efficiently. A little care is required while connecting the plug so that there is no twist in the pipe.

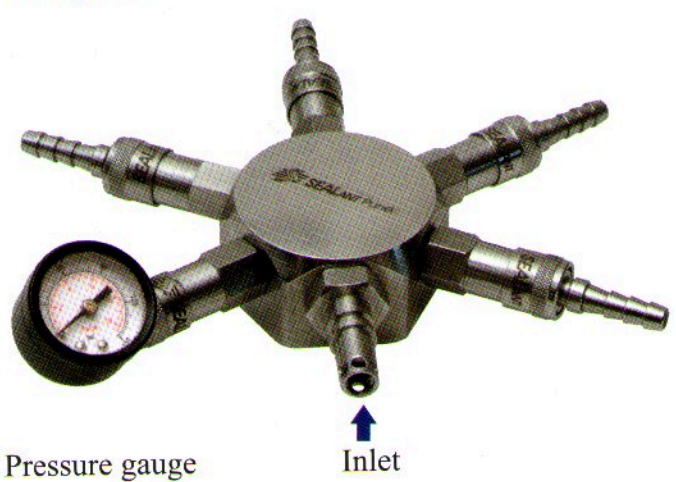
This locking system is available for all sizes of Through, Single Shut off Heavy Duty & Double Shut Off couplings.

Manifold

Manifolds facilitate multiple connections from a single source. They are especially useful where many tools are used alternately. Thus they reduce the cost of piping. Centralised piping can be set up in any desired location.

Manifolds are available in two types, Hexagonal & Q. Both types are available with a pressure gauge & a drain cock. Nominal bore of inlet is twice that of outlet to provide sufficient supply of air.

Hexagonal



Pressure gauge

Inlet

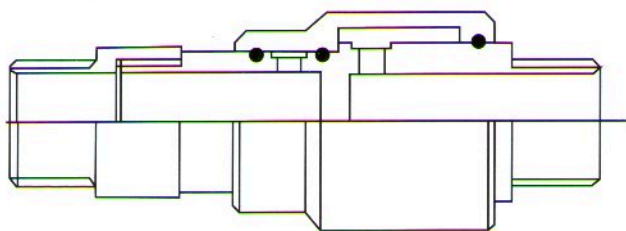
1/2" Inlet - 1/4" x 4 nos. outlets



Inlet

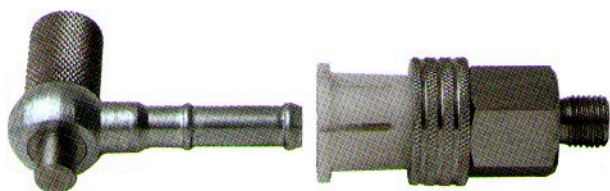
3/4" Inlet - 1/4" x 8 nos. outlets

Slide Valve



Slide Valve are used on fixed lines where frequent opening & closing are required. Flow starts & stops by just sliding the outer sleeve, so the operation is very fast. Slide valves require very less space than conventional valves which have hand wheels. Due to convenience in operation, slide valves prove to be very useful in pressure testing & pneumatic gauges.

Special Couplings

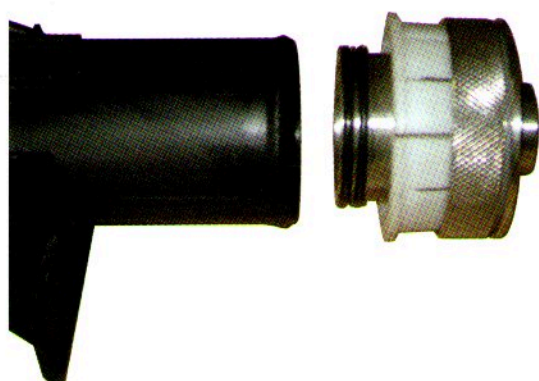


Banjo sealed

Banjo sealed

Inlet

Enlarged View



Our company is noted for developing quality products which are labour and time saving, compact, user friendly and highly efficient. We have developed QRCs for pressure testing to suit different end connections such as flared pipes, ribbed tubes, banjos etc. With our specially designed QRCs, connection and disconnection time is reduced to a minimal and testing efficiency is increased many folds.

**We have more than 2000 types of Quick Release Couplings
from 1/8" to 8" in various sizes, types, materials, seals & end connections
choose to suit your requirement**



Precautions

- Select the material of constructions and seal carefully to suit fluids, pressure and temperature. Improper selection can cause leakage.
- Any foreign material in fluid, if it is not filtered, can cause leakage.
- Avoid connection or disconnection of pressurised line.
- Tapping of valve end to bleed residual pressure must be avoided.
- Welding of QRCs directly can cause damage to the internal seal and cause leakage.



SEALANT ENTERPRISES

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