

### Viega India Private Limited

E-565, GIDC Phase 2, Village Rasoolpura, Sanand - 382110. Ahmedabad, Gujarat, India

Branch Office:

### Viega India Innovative Technologies Private Limited

4th Floor, Ocus Technopols, Sector 54, Golf Course Road, Gurgaon-122002. India.

Phone +91 (0) 124 4359300-99 Fax +91 (0) 124 42637-68

innovations@viega.in viega.in







### Viega.

## CONNECTED IN QUALITY

Here at Viega we know: Quality is everything. Without quality, everything means nothing. That's why we strive to surpass ourselves each and every day. And it's why we're working hard to achieve our vision for the future – with active input from our customers and without losing sight of our past.

Viega has been connected in quality for over 120 years. Our family-owned company had its sights set on revolutionising installation technology from the very beginning. And now Viega has just under 5,000 employees and ten sites, making it one of the world's leading installation technology companies with a reputation for staying true to its roots and setting its own standards.

As an innovation driver, we focus on more than just products – we create solutions that make people's lives better and maintain drinking water hygiene, energy efficiency, convenience and safety. With our intelligent systems, we are installing the lifelines for the buildings of tomorrow. We are also turning rooms into living spaces.

Viega's mission is to keep open lines of communication with customers and support them in their day-to-day work. That's why we share our expertise with customers around the world, marry materials and technology with convenience, dedicate ample time to quality assurance and invest in research and development. The result is an integrated system of more than 17,000 items that can be delivered in no time without any hassle.

Quality is everything. Without quality, everything means nothing.







# CONTENTS



Viega Megapress S: Saves installation time, labour costs and a lot of welding work.

Viega Megapress S: Quick, clean, safe and completely weld-free.



The SC-Contur: Ensures leakproof installation of steel pipes. For sure.

12 Mechanical services and Fire protection services.

Viega Pressguns.

Pipe overview.

The product range.





### One system for all applications

Viega Megapress S is the press technology specifically designed for thick-walled steel pipes. The formed-pipe connectors made of 1.0308 steel material with a zinc-nickel coating guarantee the highest quality and durability, and therefore of course a long service life. Steel pipes suitable in accordance with EN 10255 (Equivalent to IS 1239), EN 10220/EN 10216-1, EN 10220/EN 10217-1, in the sizes % to 2 inches - and now also in 2½, 3, and 4 inches - can be connected safely and reliably using the Viega Megapress S system.

Applications	Certification
Heating/cooling	TÜV, KITEMARK
Compressed air/ technical gases (e.g. nitrogen)	TÜV, KITEMARK
Sprinkler systems/ fire extinguishing sys- tems (wet/dry)	VdS, FM
Shipbuilding	DNV/GL, LR, RINA
Industry	TÜV, KITEMARK











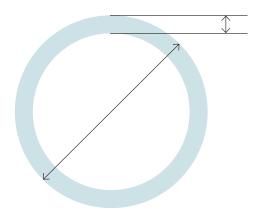


#### An economic advantage

Viega Megapress S has a clear advantage over common connection methods for thick-walled steel pipes. Especially when it comes to welding, cold press technology is far superior. Although welding is a proven method still today, it always involves high time expenditure, permanent fire risk and strenuous physical effort. This does not only render welding economically unattractive caring heavy gas cylinders and welding apparatus is really back-breaking task, especially if the connection is located several metres high or at hard-to-access locations. Cold press connecting technology makes Viega Megapress S simply faster, safer, and more efficient. Viega press machines also make sure that connections are durable and safe.

### Through thick and thin

Viega Megapress S can be used to connect both thick-walled steel pipes of threaded pipe quality and pipes of boiler pipe quality. The connectors are especially designed for processing different external pipe diameters and wall thicknesses, thus offering maximum flexibility.



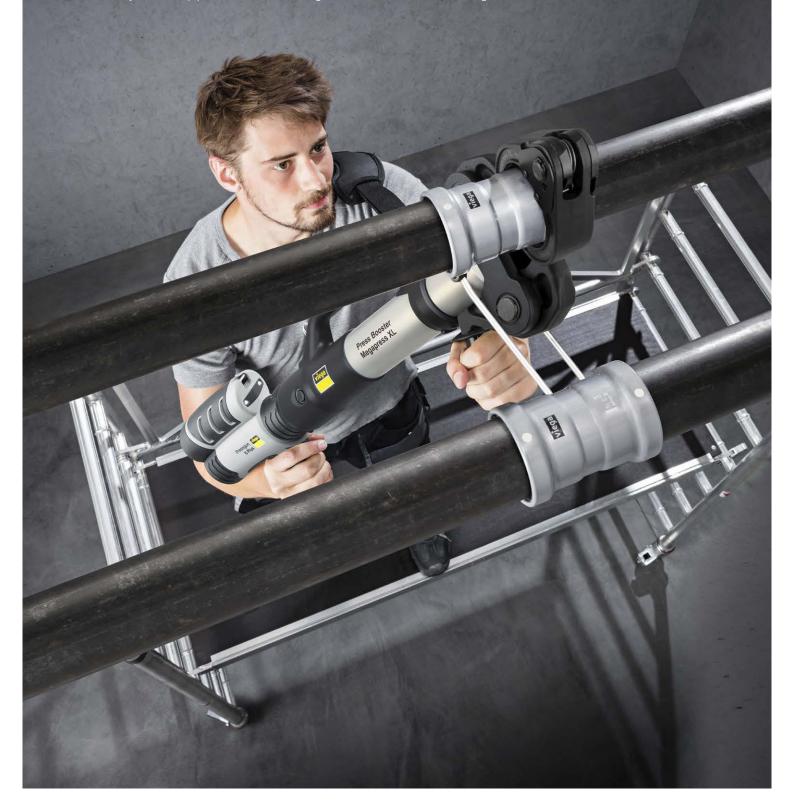
Pipe wall thicknesses and diameters suitable for steel pipes in accordance with EN 10255 (Equivalent to IS 1239), EN 10220/ EN 10216-1 and EN 10220/ EN 10217-1.

Whether seamless, welded, galvanised, industrially painted, epoxy-resin coated or black: Viega Megapress S connects pipes with the most different surfaces. Durable and safe - from % to 4 inches!



# QUICK, CLEAN, SAFE AND COMPLETELY WELD-FREE.

Black steel pipes formerly meant welding work. With Viega Megapress S, press technology now finds its way into steel pipe installation and brings about a whole list of advantages.



### Up to 80% faster completion

The connection with Viega Megapress S is ready in a few working steps. Just cut the steel pipe to length, deburr and clean it, and mark the insertion depth of the connector to the pipe end (Fig. 1). Then put the connector on the pipe and apply the press jaw or press ring (Fig. 2). Join Megapress S connectors from % to 2 inches with the aid of a Viega press machine (Fig. 3). Additional force is required for pipes from 2½ to 4 inches therefore the Pressgun-Press Booster is utilised. (Fig. 4). Finally remove the safety tag on the press connector to indicate that pressing has already been completed at this place. It is irrelevant which steel pipe wall thickness is used as long as the pipes are suitable for steel pipes in accordance with EN 10255 (Equivalent to IS 1239), EN 10220/EN 10216-1, EN 10220/EN 10217-1.

The result is a safe and guaranteed leakproof connection which is ready for use. Cooling times or a fire guard are no longer necessary. And best of all: Press technology is not only safer and easier but also more efficient. Viega Megapress S can save up to 80% installation time compared to Welding. For example, a 4-inch press connection is possible in under 20 seconds. Welding takes over 25 minutes, depending on the effort involved. The situation is similar with other methods, such as threading or grooving. In terms of speed, they also can not keep up with cold press technology as they consume significantly more time.

#### A new dimension of force

Megapress S XL can be used to press larger steel pipes of sizes 21/2 to 4 inches. It's logical that the force needed for a force-fit connection increases - but equally logical and clever is the Viega solution: the Pressgun-Press Booster. This force booster which is attached to a Viega press machine ensures the required press energy for a reliable connection. The geometry of the spherical heads of the hinged adapter jaw had been especially developed for pressing with the Megapress XL press rings. This geometry reliably transfers the higher pressing force and rules out accidental use with incompatible press rings. The carrying strap additionally attached to the press machine as well as the low weight of the Pressgun-Press Booster ensure the best possible ergonomics while working. This makes the Pressaun-Press Booster one of the most innovative solutions on the market.

In addition you find the installation steps on: viega.in



The steel pipe is cut to length and cleaned. Then the insertion depth is measured and marked, Then the Megapress S connector is put on the pipe up to the mark.



For pressing Megapress S connectors from 11/4 inch upwards, only press rings with hinged adapter jaws are used. For smaller sizes between % and 1 inch, both press jaws and press rings with hinged adapter iaws are available.



The connector is pressed in a few seconds using a Viega press machine thus connecting it with the pipe by a force-fit connection.



### **REASONS FOR VIEGA MEGAPRESS S**

- In terms of economy, up to 80% faster than Welding and 35% faster than Groove Fittlings.
- Absolutely fire-safe, because neither flames nor fumes arise with cold press technology.
- No additional time and cost expenditure for fire protection precautions.
- Viega SC-Contur in all Megapress S connectors. This immediately indicates any inadvertently unpressed connections during the pressure
- Presses thick-walled steel pipes with nominal diameters from % to 4 inches, regardless whether the pipe is seamless, welded, black, galvanised or epoxy-resin coated.
- Thanks to the innovative Pressgun-Press Booster, it is possible to connect steel pipes of sizes 21/2, 3, and 4 inches by a force-fit connection.



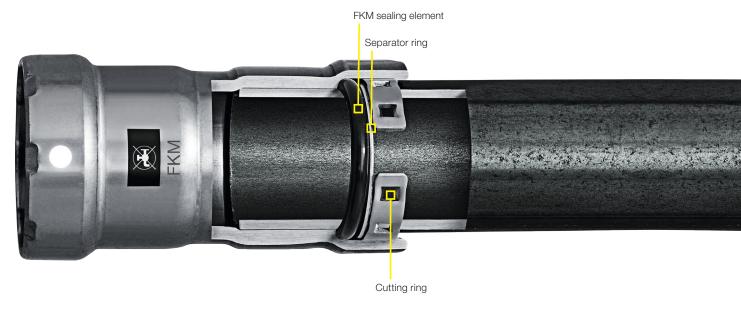
Megapress S XL connectors are pressed easily, quickly and safely using a press machine and the Pressgun-Press Booster.



Viega Megapress S with SC-Contur

# ENSURES LEAKPROOF INSTALLATION OF STEEL PIPES. FOR SURE.

The unsurpassed economic advantage of press technology is obvious right from the very first connection. And when it comes to safety: Megapress S – as with all Viega press systems – also stands out thanks to the SC-Contur.



To prevent damage to the sealing element when the pipe is inserted, Megapress S fittings up to 4 inches feature a protective separator ring. The cutting ring bites into the pipe during pressing and gives particular strength to the connection.

Viega SC-Contur is an innovative safety that causes guaranteed forced leakage in unpressed connections. This identifies any inadvertently unpressed connections during the leakage test and they can be pressed subsequently. Viega SC-Contur ensures 100% safety - over the entire testing range.

### Complex requirements, simple solution

Viega Megapress S comes with the SC-Contur. Forced leakage is produced in Megapress S by an optimised tolerance between the press connector and the steel pipe. This is the best answer to the special requirements on a connector made by the different wall thicknesses and surfaces of steel pipes. Megapress S becomes a flexible steel pipe connector system by matching the connector diameter to the large number of steel pipe variants (Fig. 1).

### Safety at a glance

SC-Contur allows the leak tightness of the entire installation to be checked simply and effectively. The dry testing range is between 2.2 kPa to 300 kPa, while the testing range for wet leakage testing is from 100 to 650 kPa. Viega Megapress S thus does not only satisfy the requirements of common standards and regulations, but even surpasses them in some cases - for example with a significantly larger pressure range.

### Not for drinking water

Viega Megapress S is not suitable for installation in drinking water pipelines. The fittings include a clearly visible mark (Fig. 2). This rules out mixing up or accidental incorrect use of Viega Megapress S.



#### Safe for all applications

Megapress S connectors of sizes from % to 2 inches have a sealing element made of FKM (Fig. 3) and can be used for operating temperatures up to the maximum of 140°C. Megapress S XL connectors of sizes 21/2, 3, and 4 inches also come with an FKM sealing element but with an increased cord thickness (Fig. 4) which is also suitable for being used at elevated operating temperatures up to 140°C. Both sealing elements allow pressing seamless, welded, galvanised, industrially painted, epoxy-resin coated and black steel pipes with the same connector.



Megapress S-FKM sealing element up to 2 inch



Megapress S XL-FKM sealing element from 2½ inch

## Viega Megapress S in Mechanical services and Fire protection services FOR HIGH REQUIREMENTS AND HIGHEST STANDARDS.

Many elements have to be observed for pipeline installations. Whether cooling, heating, sprinkler, or compressed air systems - each application has unique requirements. Viega Megapress S offers a variety of advantages in all cases that make the decisive difference.



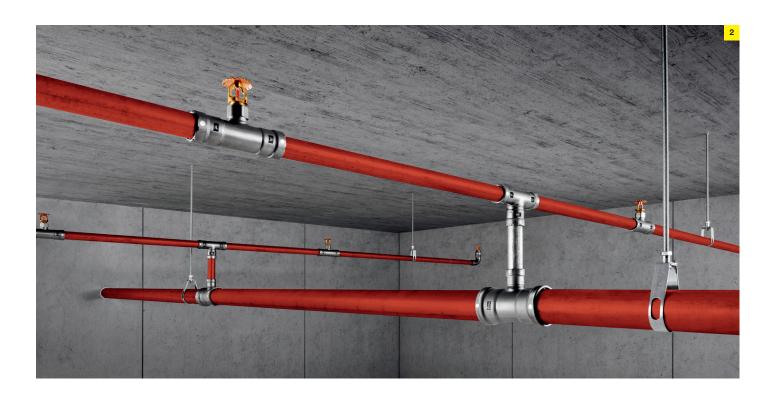
#### Large pipe sizes for low temperatures

When it comes to cooling systems, it is generally known that larger dimensions are used to transport the required cooling capacity (Fig. 1). Megapress S XL sizes from 21/2 to 4 inches satisfies this requirement without welding even in large cooling systems. The system can even be downsized without any problems using Megapress S sizes from % to 2 inches.

### Corrosion protection and time savings with one connector

Corrosion protection must be given special attention in cooling systems. The high temperature gradient between the medium conveyed and the surrounding room air quickly results in the formation of condensation water, thus increasing the risk of corrosion. To avoid this, the use of industrially pre-painted steel

pipes is recommended. However, if the installation is joined by welding, it requires removal of the coating from the pipe and then extensively reapplying after welding. This is different when using Megapress S. The connectors can be pressed immediately on the coated pipe.









### Sprinkler and fire extinguishing systems

Sprinkler systems of thick-walled steel pipe (Fig. 2) are mandatory due to their reliability, durability, stability and long service life in buildings of high risk classes, e.g. industrial and commercial facilities. After all, they must not only resist the intense heat in the event of a fire but also withstand the stringent external operational demands in everyday use. Viega Megapress S with the sizes from 1 to 4 inches is ideal for construction and extension of such fire protection systems. The system complies with the specifications of the highest risk classes and has VdS and FM certification. Until now, permitted use

was only for grooved coupling or welded systems in the highest fire hazard classes (production and storage risks). With Megapress S, press technology can now be used without any concerns.

### **Industrial heating systems**

Thick-wall steel pipes are perfect for being used in industrial applications. The Megapress S system can withstand the high industrial requirements and is installed quickly and safely thanks to the cold press technology.

### Compressed air systems and technical gases

Good examples for steel pipe installations in industrial applications are compressed air systems (Fig. 3) and pipe networks for technical gases such as nitrogen. Viega Megapress S in these cases satisfies the high requirements, facilitates installation in the ceiling area of industrial buildings, and enables convenient T-piece installation for extra fast, safe, and clean connection with devices.

### **Viega Megapress S**

# PIPE OVERVIEW.

Steel pipes in accordance with EN 10255 (Equivalent to IS 1239), EN 10220/EN 10216-1, EN 10220/EN 10217-1 are suitable for use with Megapress S connectors.



Megapress S – EN 10220/10216-1 and EN 10220/10217-1 – boiler pipe quality – pipe series 1					
Thread	Nominal	Nominal	External diameter	Pipe wall thickness	Pipe wall thickness
size	width	external	incl. coating	EN 10220/10216-1	EN 10220/10217-1
		diameter		seamless steel pipes	longitudinal seam steel
					pipes
[Inch]	DN	[mm]	[mm]	[mm]	[mm]
3/8	10	17.2	16.7–17.7	1.8–4.5	1.4–4.0
1/2	15	21.3	20.8–21.8	2.0-5.0	1.4–4.5
3/4	20	26.9	26.4–27.4	2.0-8.0	1.4–5.0
1	25	33.7	33.2–34.2	2.3–8.8	1.4–8.0
11⁄4	32	42.4	41.9–42.9	2.6–10.0	1.4–8.8
11/2	40	48.3	47.8–48.8	2.6 – 12.5	1.4 – 8.8
2	50	60.3	59.7-60.9	2.9 – 16.0	1.4 – 10.0
21/2	65	76.1	75.3–76.9	2.9 – 20.0	1.4 – 10.0
3	80	88.9	88.0-89.8	3.2 - 25.0	1.4 – 10.0
4	100	114.3	113.2115.4	3.6 – 32.0	1.4 - 11.0

	N	Megapress S – EN 10255 (	Equivalent to IS 1239) – threaded pipe q	uality – heavy series H and med	ium series M
Thread size	Nominal width	Nominal external diameter	External diameter incl. coating	Pipe wall thickness for heavy series H	Pipe wall thickness for medium series M
[Inch]	DN	[mm]	[mm]	[mm]	[mm]
3/8	10	17.2	16.7–17.5	2.9	2.3
1/2	15	21.3	21.0–21.8	3.2	2.6
3/4	20	26.9	26.5–27.3	3.2	2.6
1	25	33.7	33.3–34.2	4.0	3.2
11⁄4	32	42.4	42.0–42.9	4.0	3.2
1½	40	48.3	47.9–48.8	4.0	3.2
2	50	60.3	59.7–60.8	4.5	3.6
21/2	65	76.1	75.3–76.6	4.5	3.6
3	80	88.9	88.0–89.5	5.0	4.0
4	100	114.3	113.1–115.0	5.4	4.5

		Megapress S – EN 102	55 (Equivalent to IS 1239)	- threaded pipe quality -	pipe type L and pipe type L1	1
Thread size	Nominal width	Nominal external diameter	External diameter incl. coating pipe type L	Pipe wall thickness pipe type L	External diameter incl. coating pipe type L1	Pipe wall thickness pipe type L1
[Inch]	DN	[mm]	[mm]	[mm]	[mm]	[mm]
3/8	10	17.2	16.7–17.4	2.0	16.7–17.4	2.0
1/2	15	21.3	21.0–21.7	2.3	21.0–21.7	2.3
3/4	20	26.9	26.4–27.1	2.3	26.4–27.1	2.3
1	25	33.7	33.2–34.0	2.9	33.2–34.0	2.9
11/4	32	42.4	41.9–42.7	2.9	41.9–42.7	2.9
1½	40	48.3	47.8–48.6	2.9	47.8–48.6	2.9
2	50	60.3	59.6–60.7	3.2	59.6–60.7	3.2
21/2	65	76.1	75.2–76.0	3.2	75.2–76.3	3.2
3	80	88.9	87.9–88.7	3.2	87.9–89.4	3.6
4	100	114.3	113.0–113.9	3.6	113.0–114.9	4.0

Megapress S - EN 10255 (Equivalent to IS 1239) - threaded pipe quality- pipe type L2					
Thread	Nominal	Nominal	External diameter	Pipe wall	
size	width	external 	incl. coating	thickness	
		diameter			
[Inch]	DN	[mm]	[mm]	[mm]	
3/8	10	17.2	16.7–17.1	1.8	
1/2	15	21.3	21.0–21.4	2.0	
3/4	20	26.9	26.4–26.9	2.3	
1	25	33.7	33.2–33.8	2.6	
11/4	32	42.4	41.9–42.5	2.6	
1½	40	48.3	47.8–48.4	2.9	
2	50	60.3	59.6–60.2	2.9	
21/2	65	76.1	75.2–76.0	3.2	
3	80	88.9	87.9–88.7	3.2	
4	100	114.3	113.0–113.9	3.6	

### Viega Megapress S

### THE PRODUCT RANGE.

The product line Viega Megapress S is ideally tuned to the installation of thick-walled steel pipes. It offers a broad selection and high flexibility in installation with a large number of different connectors, such as couplings, elbows, threaded adapters, reducers, Tees, and flanges. The Megapress S product line is available in the sizes %,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 1, 1  $\frac{1}{4}$ , 1  $\frac{1}{2}$ , 2, 2  $\frac{1}{2}$ , 3, and 4 inches.

○ Megapress S – Special application (FKM)



() 4316



4216XL



O 4316.1



O 4216.1XL



O 4326



4226XL



O 4326.1



O 4226.1XL



O 4318



4218XL



O 4317.2



O 4217.2XL



O 4311



O 4211XL



4214XL



O 4312



O 4212XL



4212.5



O 4315



O 4215XL



O 4315.5



O 4215.5XL



O 4315.1



O 4215.1XL







O 4356



○ 4256XL



4359 4359.1 4359.6



4259XL 4259.1XL 4259.6XL



O 4375.8



O 4275.8 XL

#### The Pressgun 6 Plus

- For metal press connector systems in the pipe dimensions 15 to 108 mm, for Megapress steel pipe connectors from % to 2 inch and for plastic piping systems from 16 to 63 mm.
- Pressing force 32kN, pressing time approx. 4 sec., weight approx. 3.2kg
- With Pressgun Press Booster for Megapress XL steel pipe connectors in the pipe dimensions 2½, 3 and 4 inch
- Smart connectivity with the Viega Tool Services app via Bluetooth®
- Infinitely rotatable press jaw fixture
- Two LEDs ensure optimised illumination of the pressing point
- Up to 35% more pressings thanks to new battery technology and optimised, more efficient components
- Servicing interval 40,000 pressings/4 years, automatic safety shutdown after 42,000 pressings
- Built-in attachment points for carrying strap or balancer

For more information on Viega Pressguns, press jaws and the matching accessories: viega.in

### i

### THE VIEGA SYSTEM CASE

- New case system, compatible with commercially available case and vehicle systems.
- Secure storage for all Viega press machines: The Viega system cases offer maximum flexibility with separate cases for Pressguns and press jaws.
- Individual cases can be combined (including trolley option).
- $\blacksquare$  Standardised case bodies with individual inserts for maximum future-proofing.
- Straightforward handling and maximum flexibility due to separation of Pressgun and press jaws.
- Extremely robust, splash-proof design.
- Loading capacity per case: 25 kg.



### Inquiry regarding material durability

### **Global Service & Consulting-Team Application**

innovations@viega.in



Customer		Building proje	ect			
Customer no.						
Customer/company*		Customer/com	npany*			
Contact persons*	Contact persons					
Street*	Street	Street				
Postal code/town*		Postal code/to	wn			
Country*		Country	ry			
Phone*		Phone				
Email*		Email				
		Potential*				
Information about the install	ation system					
Planned system*						
Dimension*						
Information about the mediu	ım					
Supplier/manufacturer*	### 					
Trade name/designation*						
Application/function*						
Concentration of the medium*						
Other components			5			
			Duration of	the condition		
max. temp.*						
min. temp.*						
max. pressure*						
min. pressure*						
max. pH value						
min. pH value						
Information about the system	<u> </u>					
Function of the complete system	<u> </u>					
Installation site*	☐ Indoor		☐ Outdoor			
Type of installation*	open		closed			
Stagnation*	yes		□ no			
Ambient conditions*	☐ Interior spaces	☐ Country air	☐ City air	☐ Sea	air	
	☐ Industrial air	Other:				
desired service life*	□ < 1 year	☐ 1–5 years	☐ 5–10 yea	rs	) years	
Free text field						