

# JOINT RESTRAINTS

## IPS PRODUCTS - JOINT RESTRAINT SYSTEM



### PIPE TO FITTING

**LH-Series:** 2" - 12" IPS Pipe Sizes  
**LHD-Series:** 4" - 24" DPS Pipe Sizes  
**DLH-Series:** 63 - 400MM DIN Pipe Sizes



### PIPE TO PIPE

**LB-Series:** 2" - 12" IPS Pipe Sizes  
**LBD-Series:** 4" - 24" DPS Pipe Sizes  
**DLB-Series:** 63 - 400MM DIN Pipe Sizes



### PIPE TO PIPE

**LPP-Series:** 2" - 12" IPS Pipe Sizes



### PIPE TO FITTING

#### For Gate Valves

**LGK-Series:** 2" - 12" IPS Pipe Sizes  
**LGKD-Series:** 4" - 12" DPS Pipe Sizes  
**DLGK-Series:** 63 - 400MM DIN Pipe Sizes



### PIPE TO PIPE

#### For Gate Valves

**LG-Series:** 2" - 12" IPS Pipe Sizes  
**LGD-Series:** 4" - 12" DPS Pipe Sizes  
**DLG-Series:** 63 - 400MM DIN Pipe Sizes



### PIPE TO PIPE

#### For MJ Gate Valves

**LMJ-Series:** 2" - 12" IPS Pipe Sizes  
**LMJD-Series:** 4" - 12" DPS Pipe Sizes  
**DLMJ-Series:** 63 - 400MM DIN Pipe Sizes

<b>SIZES</b> .....	2 - 12" IPS, 4 - 24" DPS & 63 - 400MM DIN
<b>MATERIAL</b> .....	CLASS 350 DUCTILE IRON PER ASTM A536, GRADE 65-45-12, AWWA C153
<b>PRESSURE RATING</b> .....	250 PSI
<b>EPOXY COATING</b> .....	ANSI/AWWA C116/A21.16-09, NSF 61 & CSA Z245.20-98, 10-12 MIL
<b>Hardware</b> .....	304-SERIES STAINLESS STEEL, OPTIONAL 316-SERIES STAINLESS STEEL
<b>INSTALLATION:</b> .....	PER IPS, DPS & DIN PIPE STANDARDS

### SPECIFICATION

All changes of directions and reductions shall be mechanically restrained. Additional adjacent joints shall also be restrained as per manufacturers recommendations. Joint Restraints shall be ductile iron and made in accordance with ASTM A536, Grade 65-45-12 and AWWA C153. All Restraints shall have blunt cast serrations. Machine threaded restraints shall not be allowed. All joint restraints shall have a FBE (fusion-bonded-epoxy) coating, 10-12 mil thickness. The epoxy coated restraints shall pass 90-Day immersion tests per CSA Z245.20-98. All Joint Restraints shall be manufactured by Leemco, Inc., U.S.A.

JOINT RESTRAINT TORQUE SETTINGS:  
 2" - 3" Sizes: 20 LB  
 4" - 8" Sizes: 50 LB  
 10" - 24" Sizes: 100 LB

LEEMCO HAS A LARGE VARIETY OF  
 FITTINGS AND VALVE ACCESSORIES.  
 PLEASE VISIT OUR WEBSITE AT [LEEMCO.COM](http://LEEMCO.COM)

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